

NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



THESIS

**DESIGNING A RELATIONAL DATABASE FOR
THE BASIC SCHOOL; SCHOOLS COMMAND
WEB ENABLED OFFICER AND ENLISTED
DATABASE (SWORD)**

by

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June 2002

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REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2002		3. REPORT TYPE AND DATES COVERED Master's Thesis
4. TITLE AND SUBTITLE: DESIGNING A RELATIONAL DATABASE FOR THE BASIC SCHOOL; SCHOOLS COMMAND WEB ENABLED OFFICER AND ENLISTED DATABASE (SWORD)			5. FUNDING NUMBERS	
6. AUTHOR(S) Clifton, Scott B.; Ferares, Frederick G.				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) The Basic School (TBS), Camp Barrett Quantico, VA 22134			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the authors and do not reflect the official policy or position of the Department of Defense or the U.S. Government.				
12a. DISTRIBUTION/AVAILABILITY STATEMENT: Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE:	
13. ABSTRACT (<i>maximum 200 words</i>) <p>The Basic School (TBS) is the first school assignment for every new Marine officer as they begin their careers. As the first example of life in the Marine Corps, the school should be a model of efficiency and display all of the traits that will be taught in the course of the Period of Instruction. The information management system at TBS is a mixed bag of stand alone applications, memorandum books, and self generated spreadsheets. The current system is not efficient in regards to time management or visibility of the data. The primary data storage systems used by the Marine Corps do not accommodate the type of text documents that are recorded at TBS nor do they allow for adequate visibility of an officers performance during the POI. The result is a duplication of effort at each level of the command.</p> <p>This joint thesis team has produced a Two-Tier Client/Server Information Management System for use at The Basic School, known as SWORD. The system was developed using current industry standards that are compliant with the policies of the Department of Defense. The management tools are also compliant with the anticipated policies of the Navy and Marine Corps Intranet (NMCI).</p>				
14. SUBJECT TERMS Database, Internet, Web Enabled			15. NUMBER OF PAGES 197	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL	

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ENLISTED DATABASE (SWORD)**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN INFORMATION SYSTEMS TECHNOLOGY

from the

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ABSTRACT

The Basic School (TBS) is the first school assignment for every new Marine commissioned officer and Warrant Officer as they begin their careers. As the first example of life in the Marine Corps, the school should be a model of efficiency and display all of the traits that will be taught in the course of the Period of Instruction (POI). The information management system at TBS is a mixed bag of stand alone applications, memorandum books, and self generated spreadsheets. The current system is not efficient in regards to time management or visibility of the data. The primary data storage systems used by the Marine Corps do not accommodate the type of text documents that are recorded at TBS, nor do they allow for immediate visibility of an officer's performance during the POI. The result is a duplication of effort at each level of the command as the company staff maintains the same data as the administrative sections, and neither has the ability to view the data of the other. Any automated solution has a requirement to be more efficient in regards to data visibility and time management.

This joint thesis team has produced a Two-Tier Client/Server Information Management System for use at The Basic School, known as SWORD. The system was developed using current industry standards that are compliant with the policies of the Department of Defense. The management tools are also compliant with the anticipated policies of the Navy and Marine Corps Intranet (NMCI). The graphical user interface (GUI) was designed to be both user-friendly and intuitive with an emphasis on ensuring that the new resource would preclude resistance to change. This type of system is the first of its kind at TBS and this proof of concept is as important as the product. The resulting solution was cost-effective and includes only those features desired by the command.

This project is ongoing and will continue to provide technological support in addition to multiple thesis submissions for students at NPS.

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ACKNOWLEDGEMENTS

We would not have been able to reach this point in our thesis or our careers without the support and encouragement of our wives and families.

We would like to acknowledge the vision and determination of Capt Ken Owens, USMC as the action officer from The Basic School. This project would not have been accepted and been able to continue much less proceed through further development without your support.

In addition we would like to extend our appreciation to the following officers for their assistance in the development of the website and the associated database:

Maj Jim Hogan, USMC

LT Brian Weinstein, USN

LT Chris Rader, USN

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DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

AI	Assistant Instructor
ASP	Active Server Page
BNA	By Name Assignment
DoN	Department of the Navy
EI	Enlisted Instructor
Formal Evaluation	A formatted document which assesses the student's performance as compared to various criteria.
HTML	Hyper Text Markup Language
Informal Bullet / Chronological Record	Non-formatted evaluations for various training events or an interaction between the student and the staff member upon which the staff member wants to comment.
IT21	Information Technology for the 21 st Century
MARCORPSYSCOM	Marine Corps Systems Command
MCAF	Marine Corps Air Facility; Marine Corps Base Quantico, VA
MCAIMS	Marine Corps Automated Information Management System
MCB	Marine Corps Base
MCU	Marine Corps University
MOL	Marine on Line
MOS	Military Occupational Specialty
OCS	Officer Candidate School
PME	Professional Military Education
SNCO	Staff Non-Commissioned Officer
SNO	Said Named Officer
SPC	Staff Platoon Commander
SPRB	Student Performance Review Board
SSN	Social Security Number
Stovepipe	A system that is in place to serve only the primary user and does not interact or interface with other systems in use.
VPN	Virtual Private Network

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I. INTRODUCTION

A. BACKGROUND

The Internet and web-based technology has continued to become a ubiquitous part of the day-to-day functioning of the Marine Corps. Given that the military no longer has the ability to envision itself getting larger, it must seek new methods of “doing more with less.” One method to do this is to incorporate new technologies into its day-to-day operations. This is not an avocation of change for change sake but for using technology to automate functions and increase efficiency. The size of the Marine Corps makes it unique in that it has the ability to speak to each new generation of officer at one time and in one place before they ever join the operating forces. The Basic School is the first stop in the career of every Marine officer, which makes it both the ideal place for experimentation as well as a unique opportunity to instruct new officers with the means to integrate new technologies.

The mission of The Basic School is to educate newly commissioned officers in the high standards of professional knowledge, esprit de corps, and leadership required to prepare them for duty as a company grade officer in the operating forces, with particular emphasis on the duties, responsibilities, and warfighting skills required of a rifle platoon commander.¹ The six month Period of Instruction (POI) combines both field exercises and classroom instruction to educate new Marine officers. The POI centers on creating officers with an appreciation for all the different aspects of the Marine Corps. The primary focus of the instruction centers on the Marine concept of “every Marine a rifleman” in that every officer has the potential to be ‘in harms way,’ leading Marines in the role of infantry platoon commander. Given this mentality, every Marine officer is instructed in basic infantry tactics and evaluated during field exercises on leadership and the employment of these tactics.²

What is missing is any education or tools to integrate emergent technologies into the day-to-day operations that the new officers will find themselves faced with upon completion of the POI. The POI for the classes graduating in 2002 is approximately the

¹ Website: The Basic School, Quantico, VA <http://www.tbs.usmc.mil/>

² Ibid.

same as it was for those graduating in 1992. The teaching techniques may have changed but not the core content. The effect of this carries over into all aspects of the operation of the school. Specifically, the administrative functions of the school do not utilize automated office tools to near their maximum utility. For example, the process used for new officers to select their Military Occupational Specialty (MOS) is a good example of the methods used by the TBS staff that could be automated. The new officers prioritize their MOS selection from one to twenty-three (seventeen for females) in handwritten form on a 3" x 5" index card, which is then manually entered into a spreadsheet³. After some human intervention to ensure a good MOS assignment for each officer, the selection process is completed based on a numerical algorithm used to ensure that the top graduates are not clustered into one set of specialties. Once the MOS selection is complete, the staff of TBS manipulates the data in the spreadsheet and then performs multiple calculations to produce numerous reports for higher headquarters and archival purposes. This process is repeated every few months for six graduating classes of up to 250 officers per year. All of this could be automated using the computers resident in the school and accessible to the students, and all of the manipulation could be completed in a matter of hours instead of several days. Further, the data manipulation to produce reports for higher headquarters could be formatted and completed with a touch of a button and would not require any staff member to access multiple programs or manually enter the output from one database into another database.

The insertion of a database resource would streamline the process of collecting, manipulating, and reporting the myriad of data that is retained by the school. TBS is an ideal setting for such a tool because there is a high student turnover rate, and each student is graded or evaluated on multiple aspects of the POI over the period of six months. This tool could be the stepping-stone for adding emergent technology instruction to the POI. The addition of new periods of instruction into the course work is not the intent of this thesis, but the idea that an administrative tool could be incorporated would lend credence to the question of "why aren't new officers taught how to use the data collection tools resident in the Marine Corps?"

³ Reference a conversation with a SPC assigned to TBS. Document is contained in Appendix B.

B. OBJECTIVES

The objective of this research will be an accurate data model representative of the information requirements of the command, an Access database, and a prototype web interface. The Access database will be sufficient for the number of users interacting with it at any one time⁴. Further, the data is protected by multiple access levels based on the status of the user (i.e. TBS staff, students, civilian administrator, etc). Security will be further enhanced by the fact that the prototype for the pilot test program as well as any follow on system will be located on the schools intranet vice the World Wide Web. The database and associated web interface can be used as a tool that will contain TBS specific functionality but will also be sufficiently generic such that it could be used by the supporting commands resident at Camp Barrett, Virginia. TBS is collocated with several other supporting commands. Additionally, this tool could be reproduced via Compact Disc (CD) for each graduating officer to depart TBS with a copy to take to the fleet. It is not the desired end state of this research to populate the Marine Corps with this tool but to demonstrate that a more efficient solution exists, and that it can be achieved for far less cost than would be incurred using an outside contractor.

The long-range goal of this research is to create a working relationship between the Marine Corps Training and Education Command (TECOM) and the Naval Postgraduate School (NPS). Initially, this relationship would provide TECOM (specifically TBS) with an accurate data model of all of the information collected, processed, and reported on each new officer, as well as information on permanent personnel who have been assigned to the command. Further, this prototype tool would automate data storage and manipulation and would serve as a one-stop information-processing site for the conduct of administrative functions for both TBS and the other resident commands. This idea is most likely not unique to staff members of the Marine Corps Systems Command (MARCORSYSCOM) who have oversight for new computer systems for the Marine Corps. This thesis seeks to correct problems unique to one command but remain general enough to have potential for a wider distribution. Some administrative functions are common to all commands no matter what branch of service, but the nature of the instruction and the high turnover of student companies pose unique

⁴ I. Blackburn, Access 2000 Programming, p. 3.

problems to TBS. Additionally, the school maintains data on twenty-eight graded events for each student that attends the school. This data added to other administrative data such as commissioning source, biographical data, etc is then manipulated in a number of ways in order to produce various reports for higher headquarters⁵. It is this data and its manipulation requirements that are unique to TBS.

The perceived benefits of the research focus on the efficiency and the elimination of redundancy from the personnel administration process. The benefits of this thesis differ slightly from the potential benefits of follow-on thesis projects. This thesis is a proof of concept and primarily a research exercise that will fuel follow-on projects and will ultimately result in a stand-alone resource for TBS. For this first thesis, the benefits focus on changing the perceptions of the TBS staff officer in that business as usual is not the only way to proceed and there are better ways to conduct business. Additionally, this resource will improve the efficiency of the personnel administration system by allowing the user full visibility (given the proper access level) to access, modify, and delete data. Reports will be generated directly from the resource and produced in the format currently in use by the command. Querying the database vice compiling the output of several databases could satisfy any request from higher headquarters. An ultimate goal would be the elimination of the “green jacket” that is maintained for each Marine. The green training jacket or simply ‘green jacket’ is a pressboard folder, which contains all of the evaluations, interviews, etc. in regards to a Marine. Eliminating the green jacket would be a giant leap forward in methodology for the command. This step in itself would have the physical benefit of negating the need to archive a green jacket for every Marine officer for a period of years after departing TBS.

C. SCOPE

The scope of this thesis is twofold. First, we will model the command’s information requirements and business practices, then we will create a database to capture all information requirements as well define the relationships to the individual Marine. “Marine” in this case is being kept general so that the data model can be the basis for follow-on thesis projects that will expand on the proof of concept for other commands. Second, we will build a prototype web enabled interface that will have the

⁵ Appendix E to The Basic School Academic Regulations Basic School Order (BSO) 5000.

ability to add and display data to and from the database. The command will be able to experiment with the resource via the Internet but they will not begin to use the resource until after the completion of the pilot test program. To date another pair of officers have agreed to produce the first of potentially several theses using this resource and the associated data model. These officers will conduct the pilot test program, fault testing, and program implementation.

D. METHODOLOGY

We decided to use a standard systems analysis approach to create the web resource. Web resource in this case refers to the entire system of the website and the database. Where applicable the website or the database is referred to specifically, otherwise resource is used to refer to both. The systems analysis approach was used with phases including definition, requirements analysis, design, and implementation⁶.

The research and development of the resource focused on three areas. First an accurate data model would be created that would link each instance of data to an individual Marine, whether they are permanent personnel or a student. The specific methodology for developing the data model will be discussed in Chapter II. Once the data model was completed, the interface was constructed so the user could easily enter and manipulate the data. A key aspect in this step is to ensure that the inputs and outputs to the system are consistent with what is common to the staff at TBS. Additionally, the format should be compatible with other databases, facilitating the importing and exporting of data instead of adding the same data in a subsequent database using a different format. The input fields were created in such a way that the staff will feel comfortable using them and will have good visibility of the data they are inserting. Finally, the outputs of the system need to be commensurate with the “look and feel” of the reports that are currently sent to higher headquarters or retained at the command.

The methodology for creating the database focuses on the data model and then moves forward to the interface and the output. The bottom-up approach captured all of the entities in one data model and then focused on a subset of the entities used to interact with the specific subset of the data.

⁶ K. Forsberg, Visualizing Project Management 2nd Ed., p. 79

In addition to the administrative functions automated by this system, a division of the research will investigate the problems and potential solutions to TBS scheduling system: the Support of Instruction System (SOIS). The SOIS is similar in function to the relational database in that each field exercise has minimum support requirements in the form of weapons and ammunition, training areas, vehicles and drivers, etc. All of these requirements are linked to the separate SOIS ID number that, depending upon the size of the company and the time of the year, may vary in total amount and type of requirements (i.e., larger companies will require more vehicles and drivers than smaller companies will). Thus, the same exercise may not consist of exactly the same number of elements twice in a row. This particular scheduling system is unique to TBS and would most likely be beyond the scope of the MARCORSYSCOM since fixing the problem would only serve one command, and a limited amount of funds must serve as many commands as possible. Currently the database is used to produce a one-page requirements document, which is subsequently briefed by all of the participating units on a weekly basis.⁷ The similarities to the administrative relational database make this scheduling database a natural extension of the thesis research. However, this will be a secondary topic for discussion and limited problem solving and not an output of this thesis. Refer to Chapter 5 for recommendations concerning the SOIS database.

E. ORGANIZATION

This thesis is organized as follows:

Chapter II provides an overview of the requirements analysis, the logical database design, and the physical database design.

Chapter III provides an overview of the Web Interface and the operation of the database resource from a secure user standpoint.

Chapter IV is the User's Guide that provides screen captures and explanations to assist the user in operating the resource. Also included, as an appendix is a CD-ROM, which contains a copy of the resource in its delivered form.

Chapter V is a discussion of how this resource can be used, not only as a tool for TBS but as a catalyst for incorporating new education into the POI. Additionally, this

⁷ Reference a conversation with TBS officers during initial project presentation.

chapter will propose any recommendations not included in the resource as well as a discussion of the next step for a resource such as this.

Appendix A tabularizes all of the entities in the data model and provides a description of the entity as well its location in the other tables.

Appendix B is a collection of forms and reports received from TBS that were used to build the database resource.

Appendix C

Appendix D is the survey presented to the user as well as a spreadsheet documenting the results in both tabular and graphical formats.

Appendix E is the HTML code used to program the web interface.

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II. RESEARCH STUDY

A. METHODOLOGY

The idea for creating a relational database for The Basic School was originally founded on a project that was created for a database class IS3201⁸, at the Naval Postgraduate School. The methodology for the development of the web resource was planned as two separate stages but conducted almost simultaneously. From the initial idea created for the database class, the system design began to take shape and was solidified after proposing the idea to the command in October 2001. The database design did not begin until approximately January 2002 and was completed in April 2002. Both the system and database design stages followed the same four-phase model as described in Chapter I. The system design was able to proceed more quickly through some phases because the command lacked an automated legacy system with which to compare apples to apples. A comparison between the proposed database system and the legacy system cannot be made since the legacy system uses pad and paper. Consistent to both stages was the desire to ensure that there is a need to represent the data in the same format as that which is required for data to be shared with other databases used throughout the Marine Corps. What will initially be used as a stovepipe system -- meaning used in standalone mode by only one command -- has the potential for broader applications. The two stages will be described chronologically as they occurred, first the system stage and then the database stage.

B. SYSTEM DEFINITION PHASE

The Basic School currently does not have a centralized information management tool that can be used to track each facet of training for Officers and Enlisted personnel assigned to the command⁹. The command currently utilizes mainframe personnel management databases that all other units in the Marine Corps are required to use. Additionally, the command is required to download and update information into a

⁸ Naval Postgraduate School Information System Technology course curriculum, 2001.

⁹ Reference conversations with TBS officers as well personal knowledge from Capt Ferares.

mainframe database that is used by schools commands throughout the Marine Corps¹⁰. The command has no stated policy or practice regarding the sharing or distribution of data that it maintains on each Marine below the level of the command element itself.

Information on individuals is maintained through a myriad of methods. These include, but are not limited to, hand written notes in a Memorandum notebook, record books with paper reports generated by various means, white boards, spread sheets, and stove pipe databases. Information management is a manual process that often involves duplication of effort, such as copying a Word document and pasting the contents into another document that meets a requirement for a report format.¹¹ The information has limited visibility and since the process is manual, information can often be overlooked, misplaced, or misrepresented.

The command has never formally sought to have a higher headquarters purchase or assist in development of an information management tool. The emergence of such a requirement has been generated by the users at the lowest levels of the command, principally by the Staff Platoon Commanders (SPC) who maintain all the records associated with training an officer. The period of instruction lasts 26 weeks for the Basic Officer Course (BOC) and 13 weeks for the Warrant Officer Basic Course (WOBC). Out of this need, many of the SPC's have begun to share information regarding information management tools such as the structure of spreadsheets and databases. Despite this, the information remains isolated on the desktop computer of the individual users and has limited utility in creating required reports and in sharing information with the requisite entities within the command.

The current system is not broken and could continue in its same capacity indefinitely. The current system is however, inefficient and could be automated to decrease the workload on SPC. The proposed system would utilize non-emergent technology in the form of a web interface. The ubiquitous nature of the World Wide Web and e-commerce makes this an easily recognizable and therefore comfortable method to interact with data. Given a proposed requirement for an information management tool, it would seem logical that the command or a higher headquarters

¹⁰ Reference Capt Ken Owens, TBS formerly assigned as Testing Officer to the command.

¹¹ J. L. Witten, Systems Analysis and Design Methods 4th Ed., Irwin/McGraw-Hill, 1998

would lobby for a contract to fulfill the need. Although this has never been done formally, informal conversations at the command have conveyed cost estimates to exceed \$100,000.¹² This cost would include all four of the phases with a significant portion of the cost associated with the system definition. As an academic pursuit, students from NPS complete the same type of work in exchange for travel expenses and reference materials.

C. SYSTEM REQUIREMENTS PHASE

The Requirements Analysis was conducted in two phases. The first included a meeting with the potential users of the new resource. These meetings were conducted in such a manner that the users were gathered in one location and queried as to what they considered useful information to retain. Also, they were asked informally if they would feel comfortable using a resource on the Internet to enter and manipulate data. A consensus of the group was reached that agreed to a Internet based resource with an all-encompassing personnel database supporting it. After the informal question about the interface, the meeting changed subjects and focused on the data model and the database. The rationale for this switch is that the problem statement for the thesis and what would ultimately decide the resource's utility would be the accuracy of the data model and not the layout of the website.

The initial group consisted of approximately twenty Marines from each TBS section as well as the supporting units resident at Camp Barrett. The meeting was separated into two groups: one to discuss the operational aspects and the other to discuss the scheduling aspects. This informal method was able to accomplish several things the least of which was to highlight failings in the current scheduling system. Specifically, Marines from the Armory were able to make note of the fact that they could not modify the output of the stovepipe system currently in use. The system in question is the Support of Instruction System (SOIS). This system was created at TBS and is used to produce a one-page document, which displays all of the support requirements for upcoming events. The system does not interface with personnel administration and is used to ensure that each event has the correct amount of support equipment (i.e., trucks, drivers, water cans, etc). Through the course of the discussion, it became apparent that the inability of the

¹² Reference a comment by the S-6 Officer during a requirements definition meeting, October 2001.

Armory Marines to change the format to suit their needs was not an isolated occurrence and was heretofore unknown to the administrators of the system. Second, the users of the proposed system were more open to discuss “the way the system should work.” This openness is believed to have occurred because it was apparent that the NPS students were coming to TBS looking for input vice handing them another system to which they would have to adapt. In this way, the users did not confine their thinking to the current system or something like it and were more open with their suggestions. The personnel at TBS as well as any other command “know” what the correct solution is, they merely do not know how to create it or who to ask to create it for them. With all of the documented suggestions in hand, we examined the user’s requirements for data, how they used the data in the “business process” to which they need to provide information, and in what form was it required. The second phase involved a detailed analysis of reports, forms, and rules regarding information requirements at the command level. The System Requirements Analysis phase ended with the documentation of the requirements to be included in the system. These stated requirements were agreed upon by both parties and included the submission of standard reports used by the command as a format for how the website would appear. The following is the list of requirements for the resource:

1. Timeline

- i. A prototype was to be demonstrated on May 16, 2002.
 - ii. The documentation concerning the prototype as well as information for continuing project development will be provided in late June 2002.

2. Focus of the thesis

- i. The focus of the thesis will be on personnel management and expects to augment the user with functionality that the MCAIMS (Marine Corps Automated Instructional Management System) database does poorly. It will not be a replacement to MCAIMS or the BNA (By Name Assignment) database but an augment that is more user friendly and has greater visibility on the retained data.
 - ii. For the purposes of the development of a prototype interface, we will seek to compile the evaluations submitted on each student as well as maintain other basic administrative data.

3. Evaluation Format

i. The resource will copy the standard evaluation form currently in use and will give the user the ability to enter a formal evaluation, an informal bullet, or an impromptu notation.

ii. The formal evaluation will also provide the user with a method to monitor the students' performance rankings for all of the evaluations submitted.

iii. Peer Evaluations will be added by the student using a Blind Write format in that one student will submit an evaluation on another and then update the database. The author will not be able to read any other Evaluation Forms or have access to the Evaluation Matrix. The students submit peer evaluations at various times during the POI to include at the completion of any student billet. Thus, the implied requirement is for the student billet holders to be able to submit formal evaluations on other students that were assigned a billet which were subordinate to the student writing the evaluation.

iv. The Chronological Record used by the SPC will be linked to a page that provides additional detail and confirms the counseling that the SPC selected. This page actually serves as a holding place for the required information to be gathered and forwarded to a final page that shows the counseling entry in the required report format. The notations in the Chronological record will be sorted by date and hyperlinked (on the date) such that the entry can be used to view the counseling entry associated with it.

4. Access (Security) Permissions

i. The model for the security permissions deny access to all areas unless the user (associated by group) is specifically authorized to view, edit, or add to the database. The types of users that will be allowed to enter data into the system will be limited to the following examples by user type:

1. S-1 (Personnel) clerk.
2. SPC (Staff Platoon Commander).
3. AI / EI (Assistant Instructor / Enlisted Instructor).
4. Company Commander.

5. Students will have limited access to write for Peer Evaluations and MOS preference selection, and will be able to document lessons learned related to evaluations submitted on them by other TBS staff officers.

iii. An overview of some aspects of the Security permissions are as follows:

1. Blind write for Assistant Instructors submitting evaluations.

2. Read access for different type of instructors such that they may be able to read basic information on the student without the ability to edit or change any of the information.

3. Company Commanders will be able to Read and Write to the Evaluation forms and the Chronological record but will not be able to edit any of the information.

4. SPCs will be able to Read, Write, Modify the Chronological record, as well as Read evaluations from any other AI. Additionally the SPC will have the ability to Write to the “Other” category in the Evaluation matrix.

5. The Administrator will have complete access and will be able to control the permissions of the other users.

6. Group association will identify the users and the permissions set accordingly.

User Group Name	Permission Description (Can Do)	Restriction Description (Can't Do)	Groups / Specific People
Basic (1)	Permission: Read only.	Limitation: Change any information. Change notices via email to Advanced or Administrative Users.	Officer Student Marines WO Students Enlisted Marines
Interim (2)	Permission: Read basic information with limited access to Read and Write to specific areas only.	Limitation: Change information in records other than that already granted in Basic. Change a counseling entry once submitted.	Student Billet Holders: - Officer Student Marines - WO Students
Intermediate (3)	Permission: Read basic information with limited access to Read and Write to specific areas only.	Limitation: Change personal information Change any other AI or EI written text. Sort data related to permissions.	Assistant Instructors (AI) Enlisted Instructors (EI) Officer Student Peer Evaluations
Advanced (4)	Permission: - Read all areas both personal and POI	Limitation: - Modify Evaluation forms (formal or	Company Commander Platoon Sgt

	related. - Sort data to produce reports, tables, etc. - Print rosters to include personal information. - Write Evaluation forms (formal and informal)	informal)	
Administrative (5)	Permission: - Read/Write access for Personal information only. - Sort data to produce reports, tables, etc. - Print rosters to include personal information. - Read / Write / Edit Evaluation forms and Chronological Record (SPC only)	Limitation: - Change any non-personal information (i.e. modify leadership evaluations or test scores) - Modify any Evaluation form not created by them	SPC Admin (S-1) Section Headquarters (CO/XO)
Administrator Group			
Super (5)	Permission: - All access - Control / Create user permissions	Limitation: No limitations.	Database Administrator

Table 2-1. User Group Matrix

5. Data Archives

i. MCU (Marine Corps University) Archives will be queried concerning the amount and format of data that is to be archived.

ii. Information related to the student companies will be archived by the Company Letter and Year of execution as well as the MCAIMS designator code.

6. Electronic Signature

i. A username and password function will be added to the resource in order to control access to the different web pages as well as to track usage of various functions.¹³

ii. The SPC and the student to certify the completion of counseling entries will use the username and password.

7. MOS Selection

i. Students will have access to a MOS preference web page in which they will be able to rank the 23 officer MOS options (17 for females) in order of preference. The user will click on the submit button which will update the database.

¹³ R. West, The Complete Reference Dreamweaver UltraDev 4, p. 375.

ii. The company staff will determine a deadline for MOS submissions so a student could change his/her mind as many times as needed and keep updating the database every time. After the deadline, the Administrator will disable the web page and the MOS preferences can then be manipulated via the resource by the company staff.

iii. This function can be manipulated in a more generic form of the resource to incorporate Duty Station Preferences for Fitness Report submission. This functionality looks forward to the time when this resource is the base model of a larger information management system.

8. Student Failure Reports

i. The standard TBS forms used to document failure of events will be incorporated in the resource (i.e. Land Navigation Failure, etc).

ii. The Safety Violator form will be incorporated in this area of the resource but the accompanying policy and interview form will be available to the officer student to peruse.

A goal of the research was to map the data requirements into one all-encompassing data model. This would include all of the stovepipe systems whether they would be used in this first iteration or not. Thus the SOIS database was included as well making the fields general in nature (Marine vice Officer-Student) to allow for a wider distribution beyond TBS. Because the data model was created from scratch, it can honestly be called 'custom made' and would include exactly that information desired by the command. The data model should meet the exact requirements of the command at this time. The system level dataflow diagram is shown on the following page.

D. DATA DIAGRAMS

1. Dataflow diagram¹⁴

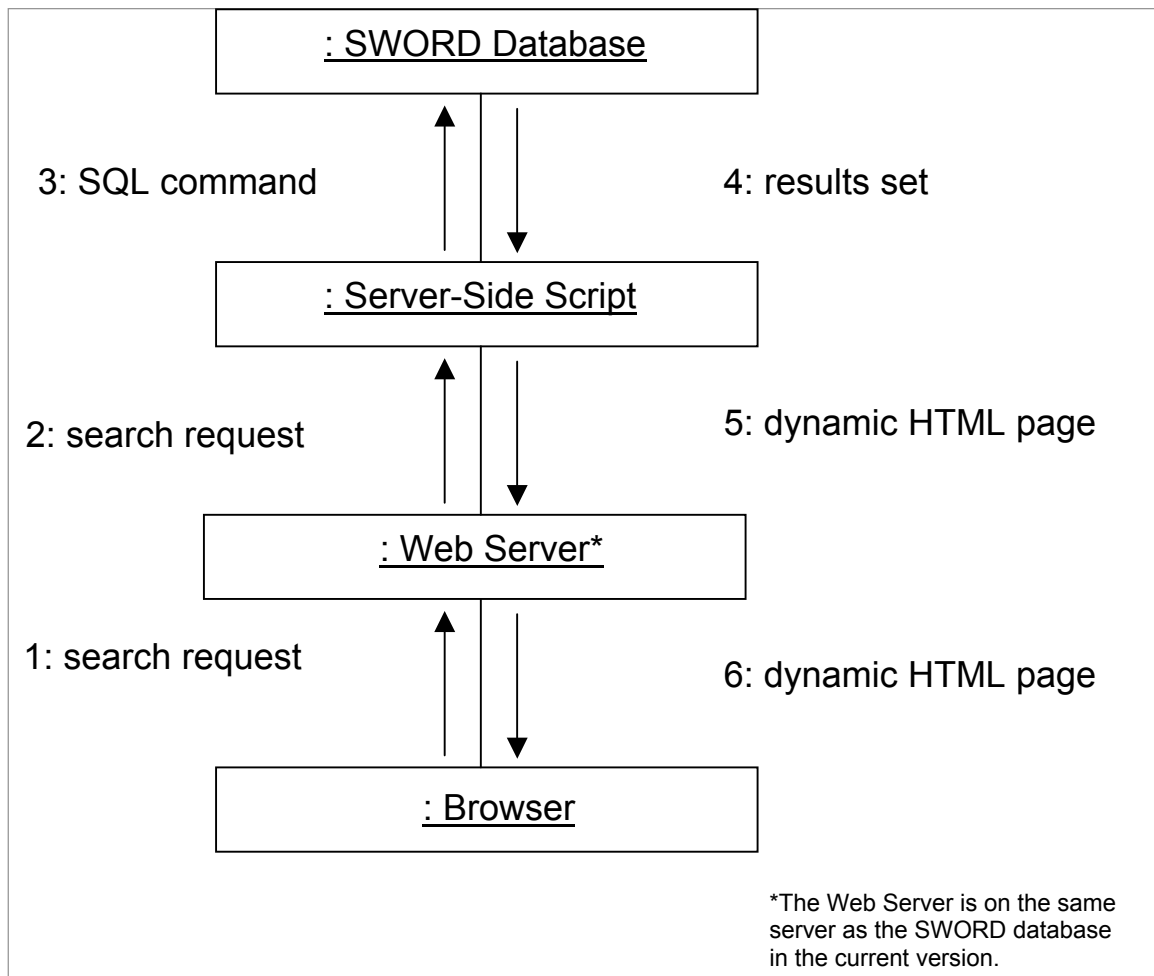


Figure 1. Data Flow Diagram

2. The Entity Relationship Diagram is displayed in Appendix C.

E. SYSTEM DESIGN PHASE

1. Concept to Creation

As was stated previously, this resource is the next step in an evolutionary lineage of tools used by the SPCs at TBS. The daily schedule at TBS is such that the SPC must maximize his/her time as much as possible. Given this, it is common for an SPC to work

¹⁴ Website, www.smartdraw.com

twelve to fourteen-hour days five to six days a week.¹⁵ The system therefore had to be easy to use, easy to learn, and efficient in the processes. Given these constraints, the resource would use a web page with a simple layout and a menu on the left hand side. The menu location is the same format as that used by the Marine Corps website (www.usmc.mil) and was adopted to provide the user with a familiar view. Each data page (BIR, BTR, etc.) layout followed a simple design philosophy that placed the most desired information in the upper left corner and then the least desired or most likely least accessed information in the lower right corner. The reports were easy to model in that the pages followed the same layout as the reports in use by the command.¹⁶ A good example of this methodology is the Safety Violator page shown below. There was no consideration given to optimizing the report format for layout or content due to the desire to build for the command vice the command adapting to what had been built. Other examples are provided in Chapter IV.

¹⁵ Reference a conversation with SPCs assigned to TBS.

¹⁶ TBS documentation contained in Appendix B taken from Basic School Order (BSO) 5000.

Safety Violator Report for Butler, Smedley

Company: Date: Billet:

Echo: Assistant Instructor / Counselor: Event: Reason for Counseling:

Reasons: Garrison Billet: Safety Violator:

Overall performance with regard to SNO potential, experience, and situation:

Unsatisfactory	Poor	Fair
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Reason for Safety Violator Chat:

Inattentive During Safety Brief	<input type="text"/>
Four Basic Safety Rules	<input type="text"/>
Weapon Not In Appropriate Firing Condition	<input type="text"/>
Negligent Discharge	<input type="text"/>
Firing Outside The Safety Limits	<input type="text"/>
Firing Endangering Marines On Your Flanks	<input type="text"/>
Unsafe Weapon Turn In	<input type="text"/>
Other	<input type="text"/>

Remarks:

Marine's Name: Signature:

Routing:

Initial / Time / Date:

RSO / Primary:

SPC:

Company Commander:

TBS Safety Officer:

TBS S-3:

TBS CO:

Figure 2. Safety Violator Report

2. User Analysis

A survey (Appendix D) was presented to the users during the prototype demonstration phase of the project. The focus of the surveys were to first construct a model of the user in order to understand the education level in regards to information technology and second to provide the users a forum to freely present ideas for improvement. The surveys were presented to a small sample of the total population of potential users at TBS.

The first three questions sought to identify then separate the users by hierarchical class, then by gender, and finally rank. Class in this instance seeks to differentiate between TBS instructors and permanent staff personnel from students assigned to TBS. Additionally, the survey had an option for Marines from the supporting commands located at TBS to participate in the survey; but there were none available so the results focus completely on TBS.

The resulting figures are representative of the population resident at TBS. Sixty-six percent of the sample population was students. The remaining thirty-four percent of the sample were part of the permanent staff at TBS and their ranks varied from Captain (O-3) to Lieutenant Colonel (LtCol, O-5).

The next set of questions sought to determine the users' familiarity with computers in general and databases specifically. Despite the ubiquity of computers, it is still possible to find educated military personnel without a great deal of familiarity in computers and advanced computer applications. In this case, basic computer applications were defined as email and Internet web surfing, whereas advanced applications would include creation of databases as well as word processing, animated PowerPoint presentations, etc. Charts 1 and 2 show the responses to the level of familiarity with computers in general and databases specifically.

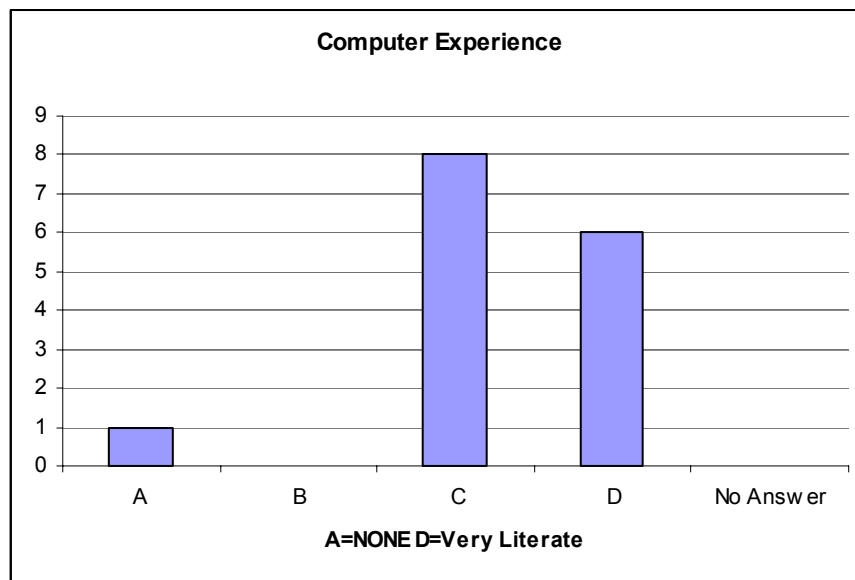


Figure 3. Computer Experience Question

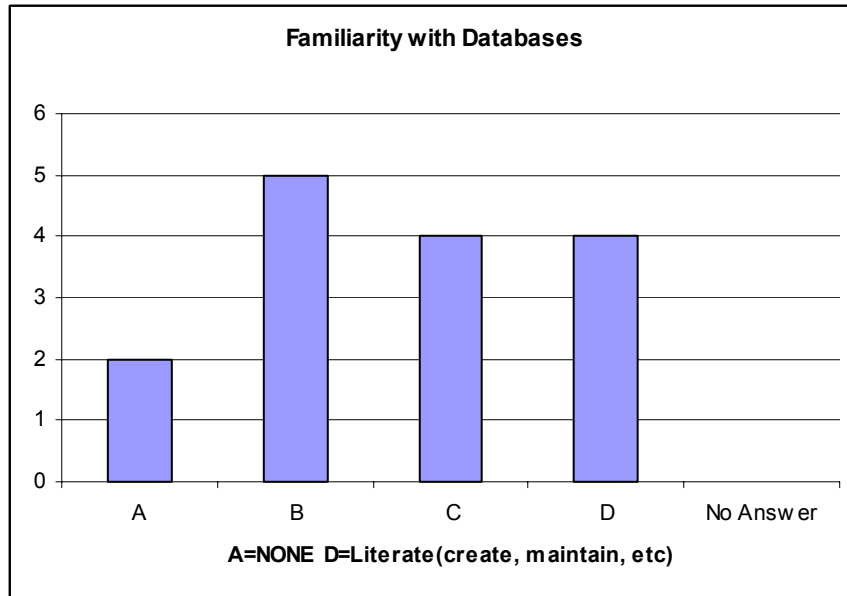


Figure 4. Familiarity with Databases Question

The next set of questions focused on gaining insight into possible changes to the way TBS currently conducts business—specifically by adding to the POI. This is a difficult subject to objectively breach in the company of TBS staff officers because the students are very busy the entire time they are assigned to TBS. Since the staff maintains extensive records on each student, any addition to the student workload would be a corresponding increase to the already exhausting workload of the staff officers. The resistance to any changes no matter the benefit to the staff or students is significant. The question in the survey as well as that posed to the user forum conducted during the prototype demonstration focused on adding two sets of classes to the POI. The first set of classes would seek to teach the students basic functionality of office tools. These skills would be used in conjunction with their assignments in that the SPC in providing directions to the students could mandate that the students' product incorporate that which they were taught in the classes. In this way, the instruction at TBS would mirror that which is resident in the operating forces in that before a Marine is expected to produce, they are first taught how to meet expectations. Thus, a student is assigned to present a battlefield study using PowerPoint and a point paper using Microsoft Word. The SPC can expect that the Lieutenant knows how to create the presentation because he was taught how in a set of classes at the beginning of the POI. Near the end of the POI, the second set of classes would serve to advance the students understanding of the office

tools and add more advanced functionality to their knowledge base. Students are not unlike any other facet of society and therefore the classes would need to be separated into different skill levels; but it should be mandatory for all students to attend the classes no matter their skill level. The desire in making the classes mandatory is to ensure that the required instruction is provided to each student and no student is allowed the opportunity to miss out on the training due to time constraints or self-described computer ability. Figure 5 shows the results of adding computer office tool instruction to the POI.

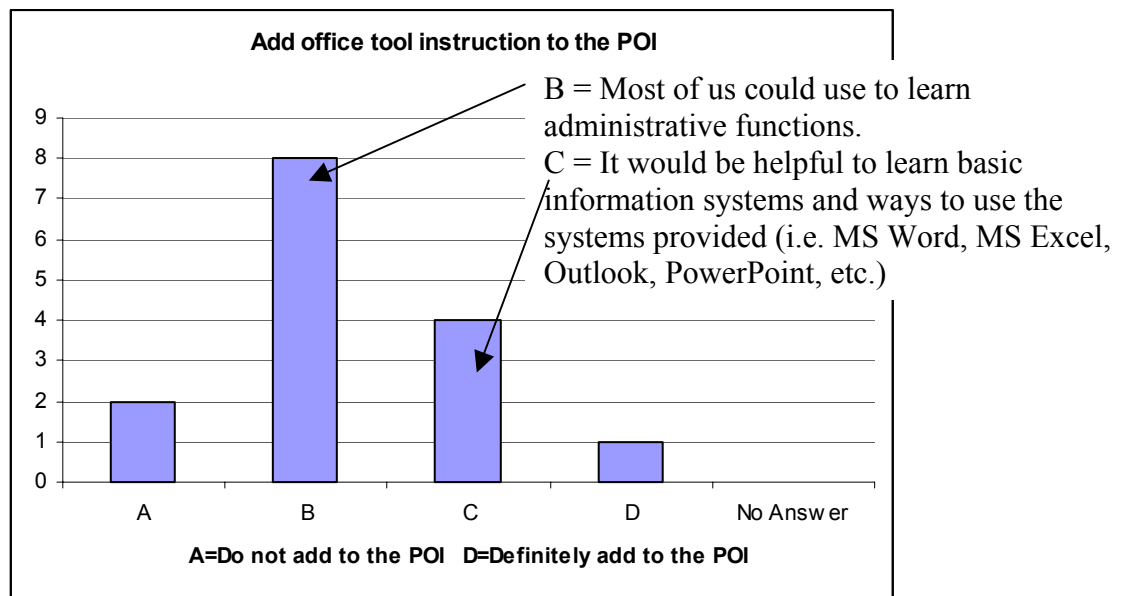


Figure 5. Add Office Tool Instruction to the Period of Instruction Question

The users were then asked to comment on various questions related to the utility of a database used by the staff and students of TBS. The majority of respondents said that a resource such as that being discussed here would be a very useful tool for TBS. This is not a comment on the lack of ability resident in the administrative staff at TBS, but more an admission that there are better ways to conduct business. Figure 6 shows the results.

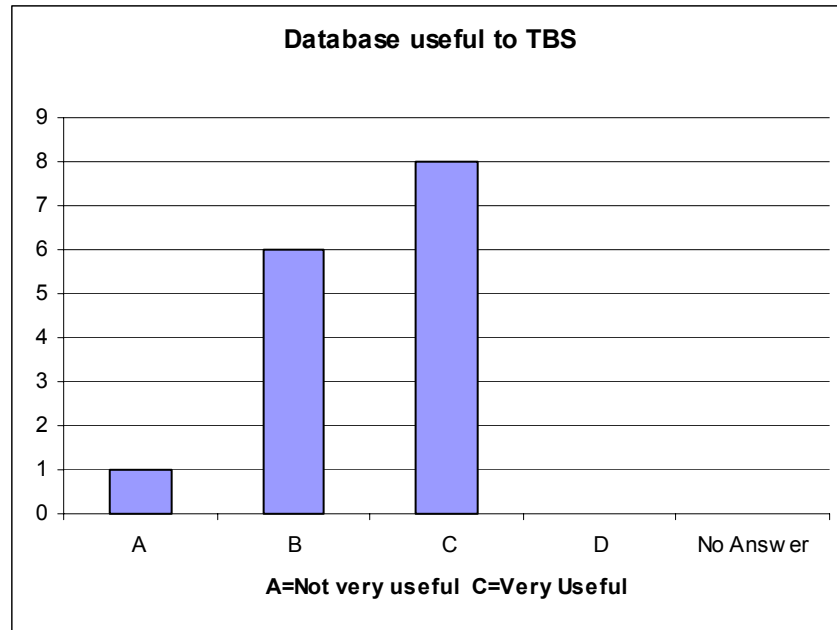


Figure 6. Database Useful to TBS Question

Along the same subject lines, the users were asked to comment on a common database schema that each graduating Lieutenant would carry with them when they leave TBS. This is a new idea since the officers depart TBS with a great deal of corporate knowledge and historical reference but little to no day-to-day operations knowledge. This is one of the reasons why the new additions to POI were discussed, because the officers' first responsibility when they arrive at their commands is to learn how the daily operations flow is maintained as well as catch up on any technological advances in use at the command that the Lieutenant may not have seen since college. At the heart of this discussion is that the mission of TBS is:

Educate newly commissioned or appointed officers in the high standards of Professional Knowledge, Esprit-de-Corps, and Leadership required to prepare them for duty as a company grade officer in the Operating Forces, with particular emphasis on the duties, responsibilities, and Warfighting Skills required of a rifle platoon commander.¹⁷

At no point in this quote does the reality of life for most of the graduating lieutenants become apparent. The truth of the matter is that the daily life of an officer in the Marine Corps focuses as much on the green tactical side as it does the white administrative side. The latter could be considered more likely to make or break a Marine's career taken from

¹⁷ The Basic School website: <https://www.tbs.usmc.mil/>.

the viewpoint that administrative knowledge will be used more often than tactical knowledge. This is not to say that the mission of TBS should be changed to read “. . . responsibilities and Administrative Skills required of a Personnel clerk.” It is however, an admission that officers depart TBS with less than a full compliment of knowledge as to what they have chosen as their career fields. Therefore, during the creation of a resource for TBS, it became apparent that this could be created in such a way as to be generic enough so that each officer leaving TBS would possess a basic knowledge of office tools as well as a resource with which to track data on their Marines.

3. Resistance to Change

As stated previously, that this project was initially drafted from a database class project and scaled to fit the needs of an entire command. Although it would appear that this resource was created from outside the command and offered to them, the fact that one of the authors was previously assigned to the command redefines the project to one that was self-generated. This being said, the specific users at TBS were often queried to ensure that the product would not only meet their needs but would appear as they desired it. “All things equal, people will become committed to that which they help create.”¹⁸ The SWORD resource seeks to take a whole-systems approach to the TBS information management system. Although this thesis focused primarily on the data model and tracking the evaluations of the students the entire system was considered. This focus helped to ensure that not just one subset of the problem was corrected while the rest of the system continued to function poorly. This thesis took into account the entire system and all of its interdependencies, thus negating a “shifting the burden” archetype.¹⁹ The command currently uses the Support of Instruction System (SOIS) database, which corrects only one symptom of the overall problem encountered at the command. By documenting the entire system and including all of the different aspects that could be attributed to a single Marine, SWORD considers the entire system and could serve TBS to make their operations more efficient.

A joke in the Marine Corps is that it has “226 years of tradition, unhampered by progress.” Although humorous, it is common to find commands such as TBS operating

¹⁸ M. Beer, “Leading Change” p. 4

¹⁹ P. Senge, The Fifth Discipline: The Art & Practice of the Learning Organization, p. 104

in redundant or in an inefficient manner simply because an improvement has not been offered and because those assigned to the command do not have the time to fix the problem. It is not uncommon for a SPC assigned to TBS to work twelve to fifteen hour workdays for extended periods of time regardless if the student companies are in the field or not. It cannot be said that everyone at TBS is a traditionalist (Loden, 1996, pp. 47-60) and therefore unwilling to change because the command has been in full support of this project from the outset.²⁰ The command knows a good solution when it is presented and is willing to fund the project. “Change, however, is more than an intellectual process; it is a psychological process as well.”²¹ During the prototype demonstration, a SPC bluntly asked, “How will you make my life easier?” and proceeded to show us the electronic tool he currently used to perform some of the functions we had just discussed in the presentation. This officer would certainly be considered a pragmatist²² in that he is willing to accept new ideas although he may not be able to initiate them himself. As a humorous side note, the tool he presented as the current SPC resource was actually created by Capt Ferares when he was assigned to TBS several years prior.

The answer to the Captain’s question was to show him that this new resource would save him time by eliminating redundant steps and would eventually take over many of the functions that he currently performs by hand. The SWORD resource was designed with the user in mind; and more importantly than just considering the user, we sought to create ownership at every step in the development process. This ownership was not necessarily to build support for the project that existed already but to demonstrate that students from the Naval Postgraduate School can help solve problems of the operating forces. Further, the knowledge that a solution was in the works was hoped to create a desire to “fix” more problem areas and thus be more open to new ideas. The officers that will be interacting with the system could be equally likely to dislike the system simply because it is different, and they may not see the value added in spending the time to change before they leave the command. These officers will not be helped by any new system no matter how useful; but their replacements will inherit a system that will not be

²⁰ M. Loden, Implementing Diversity, pp. 47-60.

²¹ D. Bryant, “The Psychology of Resistance to Change”, p. 193.

²² M. Loden, Implementing Diversity, pp. 47-60.

the traditional method and these officers will be the next generation of change agents²³ resident at the command.

A further discussion of change management is required at this point in that the reports and input forms that were used to model the web interface could not appear too different from what is currently being used; otherwise, the staff as well as the higher headquarters receiving them will resist the new format. Given this constraint, part of the documentation that was requested from the command was a copy of each type of report either submitted to higher headquarters or retained internally at the command. The reports from the database were created to appear as close to the legacy reports as possible. To a point, a new system can produce newer and better-looking reports. However, there is finite percentage of change that would be tolerable to which the personnel using it would continue to feel comfortable. It is possible for the new report to be an improvement but the appearance (i.e., font, spacing, alignment, pictures, etc) differs so much that the user does not 'like it' and cannot describe why. Should the reports be too different, the user may resist the use of the new system because the output is "unreadable." Unreadable in this case is a metaphor for an indescribable dislike for something new and different no matter how much of an improvement it may prove to be. This extreme case may be seem far fetched but it is not uncommon to find facets of the military stuck in the old way of conducting business because the users or the commanding officer does not like the new system.

4. Training

The training required to use the new system will focus on navigating the various pages and understanding what information is contained therein. Chapter IV is the user's guide, which shows a picture of each type of page and the subsequent options on each one. It is believed that a user with basic knowledge of computers, meaning web surfing and email will be able to access and navigate the SWORD resource.

F. IMPLEMENTATION AND MAINTENANCE PHASE

At the completion of the prototype, the project will enter the second of four possible implementation phases:²⁴

²³ Ibid pp. 47-60.

1. Design and Creation Phase - ends with the completion of this thesis.
2. Prototype Experimentation - ends upon delivery of the follow-on thesis for pilot test program.
3. Follow-on development – completion date is uncertain as to a time or milestone.
4. Expanded distribution to other commands.

The website was created on the SEABEEONE server located at the Naval Postgraduate School where it can be accessed via the World Wide Web. After the requirements analysis conference in December 2001, the website was advertised to the staff of TBS so they could watch the continued development and interact with the system. A parallel desire was to gain feedback directly from the users that had accessed the website. Although this did not occur in any formal forum other than the meetings in May 2002, it continued to show our determination to the command to work for them instead of working for us. The implementation plan is to transfer all of the software to the web server located at TBS. Although the resource can be accessed via the web, it is unnecessary for the information contained in the database to reside anywhere other than inside the firewall at TBS. This location would also serve to add an additional level of security due to the limited number of users with access to the TBS intranet. The ideal method to deploy the software would be to locate the database on a data server and the website on a separate web server, thus a three-tier design with the computer being the third tier.²⁵ Since this was an academic thesis by students at NPS we were limited in the available number of servers and thus a two-tier design was used. TBS also has a limited number of servers thus a two-tier implementation would be the result and would make the implementation easier because it would mirror the NPS site. The danger in a two-tier system is the loss of one server would result in the loss of both the database and the web resource.²⁶ Although this is a possibility, it will be within the scope of the follow-on thesis team to convince the command to expend more funds for the upgrade to three tiers.

The pilot test program and evaluation program will not be conducted on this prototype in its current form. The follow-on thesis that was initiated in May 2002 will

²⁴ K. Forsberg, Visualizing Project Management, p. 164.

²⁵ D. Kroenke, Database Processing: Fundamentals, Design & Implementation, pp. 279-282.

²⁶ Ibid.

produce a more robust prototype resource that will enter a pilot program in the fall of 2002.

Maintenance of the prototype for experimentation is the only remaining discussion point at TBS. The various schools of thought range from the Testing office to the S-6 (Communications) office to the Adjutant (senior administrative officer). The correct answer is subject to as much speculation as politics and is beyond the scope of this thesis to voice an opinion. A civilian GS-13 who works at TBS in the Testing office has offered her services to assist in developing and executing the pilot test program. This is not a subtle vote for the testing office but a declaration that there is resident knowledge at the command that could be utilized in assisting to maintain a system such as this. Once the final version of the resource is complete with the pilot program and evaluation testing it will require some civilian presence to maintain it. The Marines assigned to TBS are very capable but their transient nature could be offset by the longevity provided by a civilian.

G. DATABASE INITIAL STUDY

As with any problem statement, there is a requirement to determine the current state and then anticipate the effect of the proposed solution. In the case of TBS, the suggestion of adding automation to a process has the same effect of switching from a horse-drawn carriage to an automobile. The current system works but could be improved; the effort could produce results and summarily not be universally adopted. The daily conduct of business is time consuming and only one aspect of the entire system utilizes a database. The SOIS, under scrutiny is a database in name only.²⁷ The program that was delivered to us did not have any relationships defined in the data model and it appeared that it was merely a front-end with which to select multiple options from the supporting unit's inventory. For this reason, the SOIS was incorporated into the SWORD data model with the relationships linking the commitment to the primary (Marine).

A major constraint on the proposed system is the user. As was discussed in the section regarding Resistance to Change, the skill levels of the users vary widely and thus the acceptance of a new computer system would follow the same distribution. The system would have to be easy to use and ultimately save the time of the user. In this

²⁷ Ibid, p. 15.

situation, any system that does not save time will not be widely accepted. One of the primary users of the system was the SPC. If the S-1 clerks are the only ones who have the time and inclination to use the system then the result is a failure in regards to the proposed outcome of the thesis.

The future implications of a fully developed SWORD application are dependent upon the reception of this thesis and ensuing endeavors. This may seem obvious but a positive response from TBS and a less than enthusiastic response from the next senior command could relegate SWORD to a life of supporting only TBS. Since the resource was created specifically for TBS; this would not be a complete negation of the effort, but could be seen as an opportunity cost spent to develop a different system²⁸. As users become familiar with the resource it will become, at least for TBS, the de facto standard. When Marines depart TBS, their experiences with SWORD will follow them and further expand the potential market for a web-enabled personnel administration resource.

SWORD seeks to assist the SPC in his personnel administration duties. Specifically, the SPC will have access to all of the standard personal information but more importantly, he will have access to all of the evaluations as well. It was the evaluations that were the primary focus of the design. The database has the ability to present every piece of data for a user to add, modify, delete, or display. The scope is centered around the Marine and his interactions with his superiors in the realm of being evaluated on their performance.

H. DATABASE DESIGN PHASE

1. Access

We chose Access for the prototype database for a number of reasons. Primarily, during the prototype development of the SWORD database and website, we were uncertain as to whether or not the command would be interested in spending any money on the development of a prototype that may not actually fit their needs. We chose Access since TBS is a command that falls under the auspices of the Navy-Marine Corps Intranet (NMCI) and as such already has Access as part of its compliment of software on the desktop computers of its users.²⁹

²⁸ C.T. Horngren, Introduction to Management Accounting, 11th Ed., Prentice Hall, 1999 p. 214

²⁹ http://www.eds-gov.com/nmcifaqs/nmcifaq.asp?f_cat=7 NMCI website.

Access has the ability to support a limited number of simultaneous users.³⁰ The development of a prototype vice an actual application for the entire command suggested that Access would be sufficient. The requisite number of users during prototyping and possibly during an initial phase of test and evaluation could still be supported by Access. SQL Server would be a more viable tool for a fully developed application based on the number of potential users and the long-term requirements proposed by the command; to include using triggers to email users about specific activities within their purview³¹.

2. Visio 2000

The SWORD database was manually constructed utilizing the model that was created in Visio 2000. Although Visio 2002 has a capability to export a schema to a database, this application did not become available to us until after we had manually created the database. Other tools, such as ERWin and Visible Analyst support this capability as well, but we did not utilize any of these tools due to lack of timely availability. Visio 2000 was familiar to us, and we had utilized the program in several classes as a tool to model things such as databases and software design use cases and were provided by NPS for academic endeavors³². For our purposes, it was a capable enough tool to lay out the database schema before actually creating the database. We were able to make numerous edits and corrections in Visio as we refined the model prior to actually creating the database.

The design of each entity and each instance within an entity was identical to that of the Visio design. Since the entities were all created manually, we had to create the relationships in Access manually as well. Each relationship was created as indicated by our Visio diagram but unlike Visio, the relationships where entities were related to multiple other entities were much easier to see in terms of visual esthetics.

A simple front-end was created as a database management tool. The tool provided us with the ability to add, edit, delete, and ultimately display a record set. It is simple in design and was mostly created utilizing the Forms Wizard in Access, with only minor changes. We limited the development of this tool to interact with the database

³⁰ I. Blackburn, *Access 2000 Programming*, p. 3.

³¹ <http://www.microsoft.com/mspress/books.asp>

³² Reference a conversation with the NPS Help Desk personnel, October 2001.

tables that we planned to display, with limited adding, editing, and deletion capabilities on the prototype of the web application.

We used Visio to lay out the design of the database manually, including the relationships of entities and the types of data that each attribute would store. The key to the data was its relation to the individual Marine. This format would prove cumbersome in that a guiding principle was not to use any data to identify the Marine i.e., a Social Security Number (SSN). Although unique, the SSN is considered part of the Marine's personal data.³³ By not using it we are following current practices of not using the SSN where it is not needed for identification purposes. This being said, each Marine was assigned a MarineID that would be automatically created by the database and then would be present in approximately 90% of the tables in the database as either a Primary or Foreign Key.

After the creation of the Marine table, additional entities grew at a near exponential rate because of the amount of data that is repetitive in a military environment. Each Marine's record is unique but some data such as Rank and Military Occupational Specialty (MOS) can be the same across multiple records. The utility of lookup tables became apparent almost immediately. Lookup tables were created to maintain information that was common to other entities and might ultimately be used to query the database. Searches based on Student Company, billet assigned, rank, and many other are common at the command. TBS provided numerous reports that the command commonly uses, but which are sorted by a common set of criteria.

The database is not merely intended to keep personal information such as home address and payroll information as it would in a civilian environment. It also retains professional information that is unique to the individual yet common among many of the records. Hence, the database utilizes Lookup tables to assist the user as well as itself in terms of queries and in maintaining consistent representation of the data.

Table 2-2 lists the Lookup Tables and type of information they contain.

<u>Table Name</u>	<u>Type of Data</u>	<u>Description</u>
Ammunition Lookup	Numerical	DODIC and Nomenclature for Ammunition
Asset Lookup	Text	Description of the Asset, its TAM and NSN
Billet Description Lookup	Text	Job description

³³ D. Courtney, Lecture during IS3201 Naval Postgraduate School, 2001.

Billet Evaluation Lookup	Text	Recorded evaluation for the assigned billet
Collateral Duty Lookup	Text	What additional duty is the Marine assigned
Company Lookup	Text	Alpha – India as well as H&S and CI Company
Counseling Type Lookup	Text	From a set of types – what type of counseling
Email Type Lookup	Text	Home, work, or other
MOS Lookup	Numerical	For those Marines with prior service MOS Or the projected MOS for the officer student
Phone Type Lookup	Text	Home, work, cellular, pager
Platoon Lookup	Numerical	1-6
Rank Lookup	Alphanumeric	E-1 thru O-10
Rating Type Lookup	Text	Text rating type (Good, Fair, Poor, etc)
Squad Lookup	Numerical	1-3

Table 2-2. Database Lookup Tables

The focal entity of the database is the Marine, and the subsequent entities associated with the personnel administration requirements of the command. An additional facet of the database is the Support of Instruction System (SOIS) being incorporated into the schema. Within the SOIS are individual “commitments” associated with each period of instruction. The leap from maintaining information on a period of instruction and the requirements to support it being tied into SWORD was a small one. A Marine, called the Primary, is in charge of each commitment, and each commitment can have many Marines supporting it. Each commitment is in support of an event, designated by an EventID, and they can be in any number of a finite set of training areas and ranges at any given time. Each Primary is responsible for evaluating the Marines that support his or her commitment. It makes sense that the evaluations associate with the enlisted Marines who support a commitment be maintained in the same manner as the officer students. As such, the evaluations would prove useful to a unit leader responsible for counseling enlisted Marines and providing Proficiency and Conduct marks or in the generation Fitness Report comments for Sergeants (E-5) and above.

Additionally, the command pointed out that they are using a DoS-based non-supported version of MCAIMS to create and maintain the schedule that is central to the school accomplishing its mission of providing training to the officer students in the various programs of instruction.³⁴ The current version of the software was not Y2K compliant, and the Program Manager for MCAIMS informed the command that there would be no replacement for a scheduling module in newer releases of MCAIMS. As

³⁴ Conversation with Capt Ken Owens, formerly assigned as the TBS Testing Officer.

with the SOIS related entities, it is not difficult to see how the entities surrounding a scheduled event could also be incorporated into the SWORD database. Each event that is scheduled is based on an EventID, is in support of Marines ³⁵with their own IDs and associated entities, and each event is either taught or led by a Marine, and is conducted in any number of a finite set of training areas, ranges, or classrooms. Again, solving the command's scheduling problem was merely a problem of identifying the myriad of one to many relationships associated with the execution of the schedule.

3. Data Model

Given the reports provided by the command in addition to several hours of discussion, the desired data to be collected per Marine was defined. The key to the data model is its relation to the individual Marine. Each table is linked by its association to the individual Marine, which includes personal information, testing, as well as information related to the individual Marine that is not specific to him/her (i.e. Commissioning Source, College degrees, etc). The focus on the data model ensured that the resource would have the correct relationships no matter what its final appearance and functionality. This is the baseline for the study and is the building block upon which the resource was built or could be the key item in the requirements definition for a private contractor and a follow-on development project.

The Data Model is separated into two basic areas: personal information and professional information. The personal information includes such administrative items as the address of the Marine and all of his dependents whereas the professional information focuses on testing, counseling entries, evaluations, etc. The Data Model was created to be specific to TBS but contain enough elements that were more general so that it would not be specific to only one command (i.e. TBS) and could be migrated to other commands as needed. In designing the initial data model, an attempt was made initially to not change "anything" but to model only the existing information requirements. In this way the resource would not be redefining what has been in place at TBS for decades. Further, this focus would serve to show our sponsors that we are working for them and not just creating something new to which they would have to adapt. In the course of this

³⁵ Reference a conversation between the Scheduling Officer and the S-6 Officer, TBS and the Program Manager, MCAIMS circa June 1998.

work, it became apparent that there was a distinction being made between graded and non-graded events. The POI has multiple graded and weighted events as well as practical exercises, which are not graded, but the performance of each officer student is tracked nonetheless.³⁶ Prior to the creation of the data model, the graded and non-graded events were kept separate; and this was not seen as a problem because the officer's class ranking was partly based on graded events while his professional evaluation included all of the events graded or not.

This separation of events did not seem to be a problem until it was graphically portrayed in the data model. The testing table included all of the graded and weighted events whereas the Land Navigation table included only the Land Navigation events. The weights are used in the computation of an officer student's total score where some events are weighted more heavily than others in the overall evaluation are.

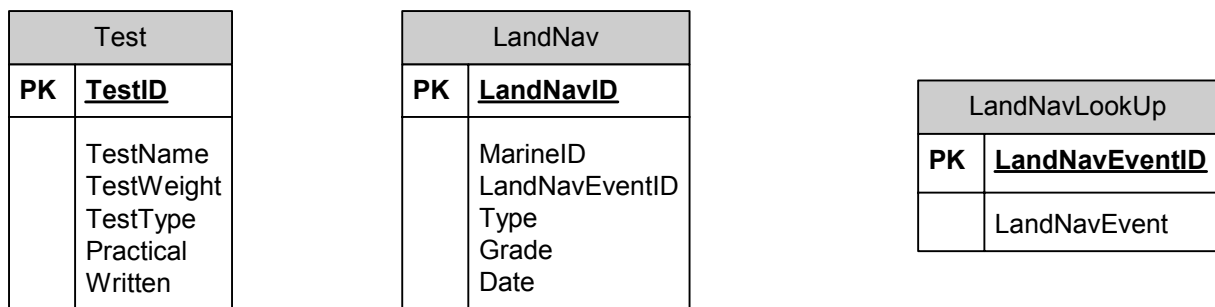


Figure 7. Test and Land Navigation Tables

Further, both of these tables were linked via Foreign Keys to the Evaluation table. The question was raised as to why Land Navigation was not part of the Testing table since the only apparent difference was the grading and weighting value of the evaluation. After closer inspection, it was seen that all of the components of the Land Navigation Table could be added to the Testing table and simply assigned a weight of zero to the Land Navigation score thus eliminating it from the student's final ranking. Any event that was conducted could be named in such a manner. Finding events associated with graded events could be resolved by simply querying the database for only those events that have a weight associated with them. The composite table was renamed Event and would continue to be linked to the revised Counseling Table via a Foreign Key.

³⁶ TBS Academic Regulations Basic School Order (BSO) 5000.

Event	
PK	<u>EventID</u>
	EventName EventDescription TestWeight TestType Practical Written

Counseling	
PK	<u>CounselingID</u>
FK1 FK2 FK3 FK4 FK5	MarineID CounselorID RatingTypeID CounselingTypeID EventID Comments MarineComment EvaluatorComment CommanderComment AllowRebuttal DecisionMakingComment CommunicationComment ExecutionComment LeaderCommanderComment TacticalTechnicalComment StartDate EndDate Ranking

Figure 8. Event and Counseling Tables

The output would be a slightly revised evaluation matrix in that there would be an additional column added that differentiates events between Tactical Events or Land Navigation Events. This additional column maintains the desire to update but not reinvent the output currently in use by the command. The significance of this compilation is that it is a slight departure from the desire not to reinvent the system already in place. Out of necessity, we had to create a new designator for the Land Navigation events that the command does not use. It serves to be consistent with the commands existing naming convention on graded and weighted events, maintaining the associated number with an event, but changing a prefix or a suffix. For example, the command uses a designator (EventName) of B1485X and a weight of three to indicate the Land Navigation Final Exercise for the Basic Officer Course. We propose a naming convention that utilizes a suffix of “P” for practical in any event that is not tested, but associated with a subsequent graded and weighted event. Under this convention, the practice exercise associated with the Land Navigation Final Exercise (Practical) would be B1485P with a weight of zero.

The fear of reinvention is that from an academic viewpoint it may seem easy to combine fields and make things “better” but from the standpoint of the user it is something new for them to learn and a departure from the known. Since this change is made to streamline the data model and the user, in the same format is collecting the same information, we believe that this does not violate the prime directive.

I. DATABASE IMPLEMENTATION AND LOADING PHASE

Microsoft Access was used to create the front end for the database administrator and therefore there was no need to decide on a Database Management System (DBMS).³⁷ The database for the prototype was created manually using fictitious data. The intent was to incrementally test the functionality of the web site as it interacted with a database. Initially, thesis-related products, such as a database for the thesis timeline, were used for this test. Once we were confident that the web site would display, update and add new events, we expanded the available resources with which the web site could interact. With continued success, we enhanced the interactivity by including the personnel database. We felt that using an incremental approach would ensure that we understood what was occurring and could troubleshoot problems as they arose.

We learned throughout the subsequent development of the web interface that there are some requirements that UltraDev 4 has, with regard to the structure of the database. We were led to make changes to the database that we would not have been required to do if we were exclusively using Access forms and queries to interface with the data. The changes did not de-normalize or impede the performance of the database; they merely enabled us to update entities through the extensive use of lookup table foreign keys³⁸. The ultimate goal is to populate the database using a download from the By Name Assignment (BNA) database, which would allow the TBS staff to populate student companies by Social Security Number. Once the student companies are populated, the data could be manipulated as required.

³⁷ I. Blackburn, Access 2000 Programming, p. 338.

³⁸ R. West, The Complete Reference Dreamweaver UltraDev 4, p.411.

J. TESTING AND EVALUATION

During the course of the development of the website, the database was continually tested as it became increasingly difficult to pass multiple variables from page to page. A limitation imposed by the web site became the number of variables that could be passed at one time and presented to the user in response to a query.

1. A prototype analysis phase is scheduled at the completion of this thesis in which TBS would be able to access the web site and interact with the database in its current form. The purpose of this phase would be to generate interest, educate the users, and continue the requirements development for follow-on projects. Since this prototype was not intended to be a deliverable product, there is no problem with making additions to the requirements list.

2. Civilian personnel (GS-13s) at TBS have offered their expertise in assisting to design and implement a Test and Evaluation program as well as the Pilot Program. This will be conducted in conjunction with the follow-on thesis team³⁹.

K. OPERATIONAL PHASE

This prototype is not expected to enter an operational phase in its current form. It will be used as the starting point for continued development by another thesis team. The follow-on project will take possession of the website, database, and the associated code in order to initiate a Pilot Program and subsequent evaluation phase. The development of new requirements will continue so the product that completes the test phase may have little resemblance to the prototype.

L. MAINTENANCE AND EVALUATION

The database maintenance and evaluation debate is the same as that for the entire system. It is not within the scope of this thesis or the follow-on teams to solve this debate for the command. Longevity or continuity of supervision of a project such as this would be as important as technical ability. The downside to military database administrators is that at some point they will be reassigned or retire and move to god's country. The specific section inside the command structure, that controls the website and database is beyond the scope of this thesis and will not be commented on. It is recommended that

³⁹ Reference a conversation with Marsha Brandenburg and Vera Ando-Winstead, May 2002.

the follow-on teams assist the command in making the decision but not suggest a solution.

III. WINDOW TO THE INTRANET

A. WEB INTERFACE DEFINITION

1. Content Disclaimer

It is not the intent of this thesis to teach a class on the Internet, web communication protocols, etc. Applicable definitions have been included to ensure understanding, but the overriding assumption is that the reader understands the basic concepts of the Internet.

2. Design Scope

The design of the web interface was narrow in scope and mainly focused on the needs as presented by the command. We wanted to present data from the SWORD database on a desktop and allow for some minor editing and creation of new record sets for such things as instances of light duty and a new address. Additionally, we wanted to be able to display the data from the database in a manner that would prohibit a significant resistance to further development and ultimate implementation of an application similar to the prototype. With that in mind, our focus was to display data in formats that the members of the command were familiar with; we decided to use existing reports and formats from existing web tools such as MarineOnLine (MOL).⁴⁰ We considered several aspects during the design of the prototype web interface, including Client/Server Functionality, an Active Server Page (ASP) solution, and a Graphical User Interface (GUI) that was effective and efficient.

a. Client/Server Functionality

The information requirements of the command and the need to access information across various sections of the entire command require the database to reside on a server. The command was ambivalent about what tool to use; they were interested in any tool that would enhance their ability to share information and ultimately save time in processing and administering personnel records so we decided to use a web interface. We decided that since TBS is a Marine Corps command that is an organization within the Department of the Navy (DoN), we would utilize the IT21 mandated internet browser,

⁴⁰ Website: <https://www.mol.usmc.mil/>.

Internet Explorer.⁴¹ This would ensure that all users of the interface are using the same browser, and we would only have to develop a tool that supported Internet Explorer. We decided that the use of an ASP server-side solution would be best given these conditions.

b. ASP Solution

1. Benefits

a. One of the most attractive benefits of the ASP solution is that all of the “business rules” are executed on the server. The client merely provides the window. All of the code associated with the retrieval, manipulation, and display of the data would be protected. The database schema and data itself would be afforded a greater level of protection as well.

b. Any problems associated with the web interface would be common to every user, since they would all be using the same browser, and in theory, the same version. Debugging problems would be confined to the web interface or the database, leaving the client out of any potential problem solutions.

2. Limitations

a. The ASP solution is server based and subsequently, there will be an increase in traffic on the command’s network and the servers. The command recently had a wiring upgrade, but this system was not included in the requirements when they sought to install the new backbone with its own requirements analysis. The backbone can most likely handle the traffic, but the command would have to ensure that its servers were robust enough to support a full-scale implementation.

b. Time saved is a key measure when considering the use a full-scale implementation and application. We needed to ensure that the computing time required to make a round trip from the client to the server and back was as short as possible. We also had to consider obtaining the required information in the least amount of time combined with the shortest number of round trips, usually associated with queries and confirmation of the information requirement.

c. The Graphical User Interface (GUI)

1. The design inspirations

⁴¹ http://www.eds.gov/nmcifaqs/nmcifaq.asp?f_cat=7 NMCI task force website.

a. We sought to find a way to represent the data to the user in a manner, which they would be familiar with, and in a way that would be instinctive. In terms of layout, we drew inspiration for colors and location of information from MarineLink (www.usmc.mil). We knew that the users could reasonably be expected to be familiar with that color scheme, and it was a good basis for starting to present information with a positive aesthetic value.

b. We had also recently visited a website for a company called Movex (www.movex.com) as we were preparing to execute permanent change of station orders. Movex had a simple menu that appeared easy to navigate and would serve as an inspiration for the layout of the template that we would use for each web page — ASP or HTML.

2. Limitations of our team

a. Neither one of us had ever had any experience in developing an application, so the genesis of the web interface was a painstakingly slow process.⁴² We received feedback from our peers at NPS, and made many changes accordingly.

b. The user had no idea what the interface should look like, and we had nothing from which to derive inspiration. We were literally starting from scratch.

B. WEB INTERFACE REQUIREMENTS

1. We, as with the definition of the web interface requirements and considerations, derived all the functional requirements for the interface, as we continued our research. We wanted to achieve some form of each of the following in the design: adding, editing, displaying, and deletion of entire records. For the purpose of the prototype, we chose not to enable any buttons to delete information, especially since we had created a fictitious Marine and filled in various pieces of data in that particular record so that we could demonstrate the other three abilities. This became vitally important as we progressed to the point where we actually demonstrated the prototype of the interface to the command and asked for specific feedback from the users. We needed to maintain

⁴² R. West, The Complete Reference Dreamweaver UltraDev 4

the data as well as the core integrity of the record set in order to facilitate feedback and further development in the Rapid Application Development of the interface.

2. The concept of access levels became apparent as we sought to limit what could and could not be done to the data in the SWORD database. The Marine entity in the database has the requisite fields to limit access to specific pages by utilizing a user name, password, and associated access level for each user based on the type of user. The development phase for SWORD was finite thus a limiting factor in continuing to develop pages. The ideal situation would be to construct multiple pages associated with each access level. This is ultimately the better method of protecting data manipulation by users. Multiple pages have the advantage of only presenting those options to the user that they have permission to interact with. Those user groups that do not have the correct permissions would not have the ability to even view, much less edit or delete data.

C. WEB INTERFACE DESIGN

1. Strategy

a. The design strategy was faced with several constraints in how it was to be accomplished. The primary intent of the thesis was to produce a prototype and serve as a proof of concept for TBS. As alluded, the command is traditional in its methods, and with few exceptions was not using the available technology to its fullest potential. The reason for this is due in part to a lack of expertise and in part to a lack of desire; because it had always been this way; therefore it must be correct. This ‘real world’ scenario contrasted to what had been taught in the classroom where the user is not continually being convinced that the project is even required. It was common during the requirements and design phases for the action officer to be one of the only consistent members of the audience. The others were new, so each presentation had to cover some of the same ground each time in order get everyone up to speed.

b. The classroom had shown us that there are multiple design strategies: waterfall, incremental, and evolutionary.⁴³ The initial intent was to use a waterfall approach and proceed methodically through the definition phase, requirements phase, design phase, and implementation phase.⁴⁴ In our case, the implementation would

⁴³ K. Forsberg, Visualizing Project Management, pp. 14-24.

⁴⁴ Ibid. p. 25

be the completion of our thesis and the initiation of a follow-on thesis that would expand on our work. As we began the requirements phase, it became apparent that we could adopt Rapid Application Development (RAD).⁴⁵ This was considered an ideal system for RAD since it is geared for information systems and it focuses on building the prototype, our goal exactly.

c. RAD allowed us to modify the product as we continued to pull requirements from the users. Capt Ferares' knowledge of the command from being assigned to TBS as a SPC became more and more valuable. This knowledge and experience relieved us from having to learn the system as we tried to understand what it was they wanted. The benefits of RAD seemed to fit nicely with the type of development we were conducting in that it allows for requirements creep as well as feedback from the customer. Since this thesis was a proof of concept, it was important for us to document as many requirements as possible even if they presented themselves late in the development. The RAD development cycle is shown in Figure 9.

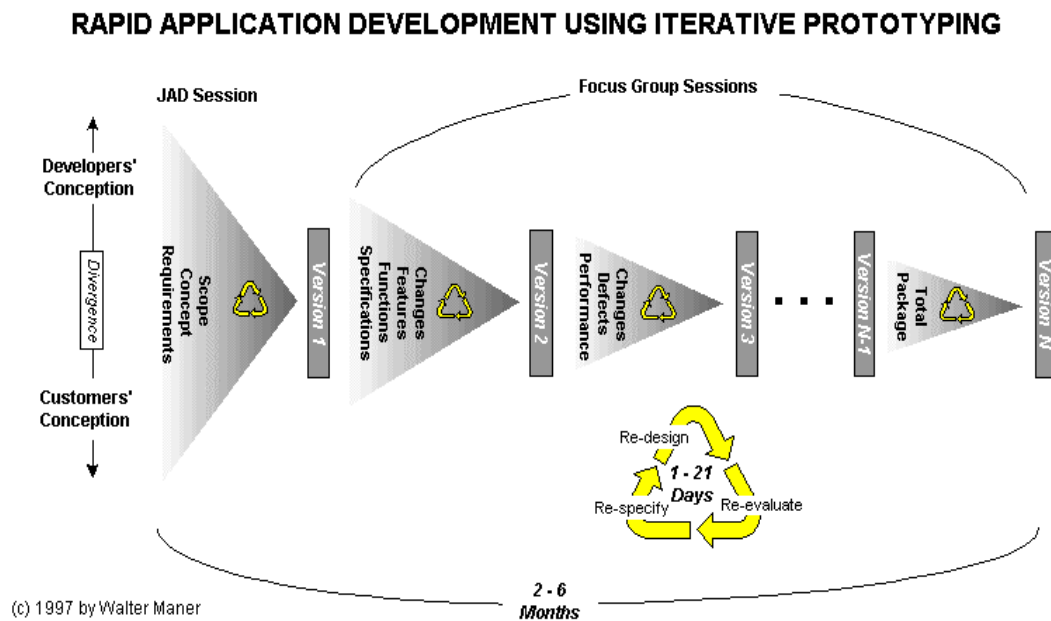


Figure 9. Rapid Application Development Cycle⁴⁶

During the course of the development, the Action Officer remained consistent but other key positions became vacant and were filled several times. As the users associated with

⁴⁵ W. Maner, Bowling Green University website: <http://csweb.cs.bgsu.edu/maner/domains/RAD.htm>.

⁴⁶ Ibid. <http://csweb.cs.bgsu.edu/maner/domains/RAD.gif>

the project continued to change, it became apparent that in order to incorporate their additional ideas we would need to be flexible with the development. Part of the research during the design phase was to refer to another NPS thesis project that developed an Education Management System (EMS) to update the Naval Postgraduate School's scheduling process.⁴⁷ This thesis was a good resource in that they were performing on a large scale what we had set out to do for TBS. PYTHON (Project Yet To Have an Official Name) had used RAD for the same reasons that we had adopted it; in order to accommodate changing requirements over time and be able to produce a viable product.

2. Practical Application

a. We utilized a server we had been granted access to at the Naval Postgraduate School. The focus of the web interface to the database was to provide a resource that met the requirements that we defined.

b. A discussion of database and website security, which is invaluable in an application of this sort, has been reserved for potential further research. Our considerations for security rested mainly in providing a place for access levels to be stored and displayed via the web interface. It became more prudent to complete the development of the proof of concept rather than extend the timeline. The extension in development would have produced the requisite pages to limit access based on various levels but it was decided to entrust this functionality to a follow-on thesis. However, we did implement the use of session variables. When used efficiently, session variables are a great tool that allow for more complex and secure applications to be built than traditional variable passing.⁴⁸ As we constructed the various pages associated with interfacing with the database, we used the session variable to identify the user and display their name in the bar across the top of the screen (Figure 10). We found that this ensured that access to pages throughout the interface could only be accomplished once a user had gone through the login procedure, which validates an individual as an authorized user of the system.

⁴⁷ PYTHON Thesis, Naval Postgraduate School, March 2002.

⁴⁸ J. Ray, Sams Teach Yourself Dreamweaver UltraDev 4 in 21 Days, p. 176.

Current User: Ferares, Frederick

<div style="background-color: #f0f0f0; padding: 5px;"> Enter New Marine Basic Individual Record Basic Training Record Recall Information Edit Existing Marine Locate a Marine's Record Basic Individual Record Basic Training Record Recall Information Evaluation Information Testing Information View Composite Data Testing Information Other Information SOIS Utility Create New SOIS Edit Master SOIS View an SOIS </div>	<div style="background-color: #f0f0f0; padding: 5px;"> Basic Individual Record Last Name: <input type="text" value="Butler"/> First Name: <input type="text" value="Smedley"/> Middle Initial: <input type="text" value="D"/> SSN: <input type="text" value="111223333"/> Nickname: <input type="text" value="Howie"/> Rank: <input type="text" value="O-1"/> Gender: <input type="text" value="Male"/> Race: <input type="text" value="Caucasian"/> Religion: <input type="text" value="Protestant"/> International: <input type="checkbox"/> Dependent Status: <input type="text" value="Single"/> Date of Birth: <input type="text" value="11/10/1980"/> SWORD Information User Name: <input type="text" value="sdbutler"/> </div>	<div style="background-color: #f0f0f0; padding: 5px;"> Basic Individual Record Contract: <input type="text" value="Ground"/> College: <input type="text" value="USNA"/> Commissioning Source: <input type="text" value="Academy"/> AFADB: <input type="text" value="5/27/2002"/> PEBD: <input type="text" value="5/1/1992"/> DOR: <input type="text" value="5/27/2002"/> EAS: <input type="text" value="5/27/2006"/> Medical Blood Type: <input type="text" value="O Positive"/> Light Duty Records: Click Here Unit Information Company: <input type="text" value="Echo"/> Platoon: <input type="text" value="1"/> </div>
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Figure 10. Basic Training Record Active Server Page

c. In keeping with the user's requirements for information, we chose to display information in a manner that the user was familiar with, specifically in terms of counseling events and the associated reports that the command uses. In the database structure, each counseling event includes all types of information that could be collected with any type of counseling event. However, when displaying this information on the prototype interface, we wanted to be able to display the requisite information associated with a particular type of counseling, instead of showing everything and leaving blank spaces on a page. We force the user to select a report format to display information, and simply exclude any unnecessary data in the record set associated with that particular counseling event and its associated report format

3. Significant Design Aspects

a. Login Procedures

1. The initial login process identifies the type of user. Based on this information, the user will be granted access to pages in accordance with the permissions for that type of user. On the first attempt, the user will be asked to provide a new password, which will then be stored in the system. Should the user enter the incorrect password, they will be directed a Failed Login page and which point they can exit the system or return to the Login Page. Notices posted on the Failed Login Page will tell the

user what procedures to follow should they continue encountering problems with the Login. See Figure 11.



WARNING

Your login attempt was unsuccessful.

Please re-type your user name and password
or return to the [SWORD Project Web Site](#)

User Name

Password

This site is best viewed at 1024 x 768

Figure 11. Failed Login Active Server Page


2. System/Page Access

Once the user has successfully logged onto the system, the page options for the prototype will focus them to the specific area of interest. The only active button on the first screen that the user is presented post login is the one that initiates a set of search criteria necessary to **Locate A Marine's Record**. Once the user has accomplished the steps associated with the search, the only active buttons on the menu will allow the user to select functions under the heading of **Edit Existing Marine**, excluding **Testing Information**.

b. Counseling Report Formats

1. As discussed earlier, the counseling event proved to be a challenge for the purposes of display. The solution was to provide the user with a page that shows a chronological listing of counseling events, followed by a subsequent set of actions. The chronological listing was something the command actually wanted, and proved to be the only way that we could actually collect the variables required in

subsequent pages to display the record in its proper format. In the prototype interface, the date is hyperlinked to a Report Format page. See Figure 12.



Current User: Ferares, Frederick

Enter New Marine

Basic Individual Record

Basic Training Record

Recall Information

Edit Existing Marine

Locate a Marine's Record

Basic Individual Record

Basic Training Record

Recall Information

Evaluation Information

Testing Information

View Composite Data

Testing Information

Other Information

OIS Utility

Create New SOIS

Edit Master SOIS

View an SOIS

Chronological Evaluation Information For Butler, Smedley

Date	Counseling Type	Rating	Comments
5/1/2002	Garrison Billet Evaluation	Outstanding	Demonstrated sound leadership abilities.
5/13/2002	Failure of an Academic Event	Good	Counseled for failing exam.
5/14/2002	Safety Violator	Unsatisfactory	SNO committed a Safety Violation
5/15/2002	Failure of a Military Skills Event	Excellent	Needs to go on Remedial PT and weight control.
5/15/2002	Peer Evaluation	Good	
5/16/2002	Safety Violator	Unsatisfactory	Another stupid mistake.

Figure 12. Chronological Record Active Server Page

2. At the Report Formats page, the user is prompted to select a report format. They merely have to match up the report format with the type of counseling record they want to view. (Figure 13) In the Figure, the Type of Counseling is "Garrison Billet Evaluation" and the user is best served by clicking on General Counseling.

Figure 13. Reports Format Active Server Page

3. Once the user clicks on the correct report format, the information is displayed in a format that the user is currently required to use according to the command's Academic Regulations, BSO 5000.⁴⁹ (Figure 14)

Figure 14. Garrison Billet Evaluation Active Server Page

⁴⁹ TBS Academic Regulations Basic School Order (BSO) 5000.

We provided an additional tool to the user on this page, as well as other similar counseling report pages. The individual is asked to provide a rating for “Overall performance with regard to SNO (Said Named Officer) potential, experience, and situation.” The SNO is rated on a scale that varies from Outstanding to Unsatisfactory. A roll over image was placed in a layer on the page with the definition of each of the ratings. If the user is in doubt about the definition of the rating, it can viewed by simply placing the mouse over the desired rating. In Figure 15, the definition of Poor is reflected in the gray window.

Current User: Ferares, Frederick

Garrison Billet Evaluation for Butler, Smedley

Company: Date: Billet:

Assistant Instructor / Counselor: Event: Reason for Counseling:

Overall performance with regard to SNO potential, experience, and situation:

☐ Unsatisfactory
 ☐ Poor
 ☐ Fair
 ☐ Good
 ☐ Excellent
 ☐ Outstanding

Decision-Making (SNO's mission analysis, estimate of the situation, and the creation of a detailed plan that puts the enemy Officer students have met minimum standards required for graduation and are capable of leading Marines. Officers may have learned more slowly than their peers, or performed poorly in early field or garrison billets. May have lacked confidence early in the course. Officers routinely were rated in the lower two fifths relative to their peers on documented leadership evaluations, but performed well enough to retain the confidence of their staff, AIs, and peers. Despite difficulties, these officers possess the character required to lead Marines and are guided by sound moral instincts. Weak areas identified over the course have been addressed and satisfactorily overcome. Remaining weaknesses offset by other strengths. Despite low leadership score, staff is nonetheless confident that these officers will be competent professionals and leaders.

Figure 15. Garrison Billet Evaluation with Roll Over Image

4. The user can select another report format, but the information that the user is looking for in the required report format will only be represented when there is similar information. The record set associated with the Safety Violator has similar fields that are represented with the report, but it is also looking for values associated with a safety violation incident. See Figure 16.

Current User: Ferares, Frederick

SWORD

Safety Violation Report for Butler, Smedley

Enter New Marine

- Basic Individual Record
- Basic Training Record
- Recall Information

Edit Existing Marine

- Locate a Marine's Record
- Basic Individual Record
- Basic Training Record
- Recall Information
- Evaluation Information
- Testing Information
- View Composite Data
- Testing Information
- Other Information

SOIS Utility

- Create New SOIS
- Edit Master SOIS
- View an SOIS

Company: Echo Date: 5/1/2002 Billet: Student Platoon Commander

Assistant Instructor / Counselor: Ferares Event: Garrison Billet Reason for Counseling: Garrison Billet Evaluation

Overall performance with regard to SNO potential, experience, and situation: Outstanding

Unsatisfactory Poor Fair

Good Excellent Outstanding

Reason for Safety Violator Chit:

Inattentive During Safety Brief False

Four Basic Safety Rules False

Weapon Not In Appropriate Firing Condition False

Negligent Discharge False

Firing Outside The Safety Limits False

Figure 16. Incorrect Report Selected, Safety Violation Report

4. Feedback Loop

a. Active Server Page Prototypes

1. As part of the user requirements, prototype web pages were presented to a cross section of users from the command. During the prototype presentation, pages such as Figure 2 were displayed; at various points, the users were polled as to the pages they liked or disliked in addition to the colors used, layout, etc. Additionally, a survey was compiled for the officer student to complete which sought to assess their relative skill level regarding relational database tools and basic computer familiarity. A copy of the survey is located in Appendix B.

2. We returned from our prototype demonstration and began an analysis of what we collected from the various users and staff members of the command. We analyzed the user surveys, examined the feedback from large group discussions, and made changes to the prototype. The development is a continuous process.

5. Web Page Flowchart

The figures below display the basic flow through the system beginning with the desktop icon and ending with the Exit page. It is noted on the diagram that the number of

pages displayed is not indicative of the actual number of page options available to the user. Figure 17 is the High Level view.⁵⁰

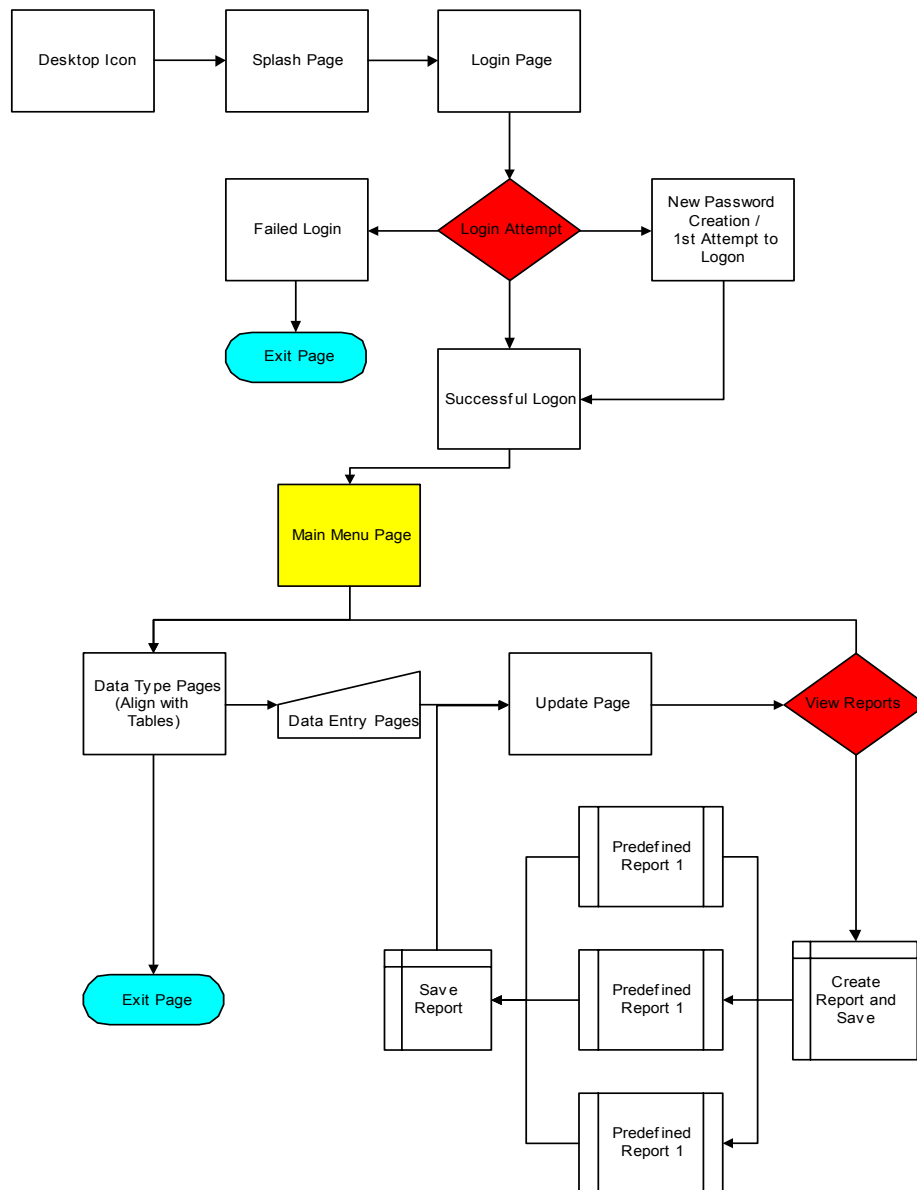


Figure 17. High Level View Flowchart

⁵⁰ K. Forsberg, Visualizing Project Management, pp. 28. Discussed during IS4300 Software Project Management, Naval Postgraduate School.

D. IMPLEMENTATION

As discussed in Chapter II, this prototype is not intended to enter an operational phase in its current state. Rather, it will be the starting point for a subsequent team of students that will augment this resource and proceed to the implementation phase of development. At this point, we need to state an assumption about the security of the data. In a potential full application, the data and the web interface will be reasonably secure based on its physical location at TBS as well as its virtual location on the TBS intranet. Although the SWORD database and interface will reside on a Web server, the TBS staff should not be able to access the database via a dial-up connection. A dial-up connection is a “nice to have” feature that could be incorporated in later versions of the resource but the proof of concept is meant to focus on core functionality. The security aspect is for the protection of the data from interception, as well as from unauthorized users making changes to the database. It is not the intent of this thesis to make the web interface secure in the same venue as an e-commerce website. It is meant to show that the data can be accessed using a web interface with considerations built in for varying security levels. It will be within the scope of the follow-on thesis to enable greater web security.

E. MAINTENANCE

1. As discussed in Chapter II regarding the maintenance of the database, a similar position is taken regarding the maintenance of the prototype web interface. The best answer balances the abilities of the maintainer and the purview of the specific section. A discussion on the merits of either of these is beyond the scope of this thesis. However, it will be covered in the follow-on effort in regards to the test and evaluation plan. The debate should not, however, exclude the possibility of contracted support for any actual application implementation

2. The command is currently conducting a review of its own business processes, especially where information management is concerned.⁵¹ The intent of the review is consistent reviews conducted by most commands at some point in time. The focus question for the review: is the command accomplishing its mission effectively and efficiently, in terms of limited resources such as personnel, equipment, and budget. If they find that they are not as effective and efficient as they could be, they need to plan for

⁵¹ Reference a conversation with Capt Ken Owens.

corrective action. Personnel record administration has been recognized as a shortfall during the past few such reviews, but the command has never taken formal steps to rectify the problem. Various members of the command have identified possible "homegrown" solutions, but there has been a consistent disagreement in deciding who will administer and maintain the solution. A good idea may 'die on the vine' if the command has stretched its finite resources and can not support the solution. During our last visit with the command, they entertained the idea of a full scale SWORD application being developed and the discussion was hampered when the concept of administration and maintenance was initiated

The organization of the command includes a staff section, the S-6, which is responsible for all of the installation's communications and information systems. The S-6 Officer has expressed concern over the implication and belief by other members of the command that SWORD should fall under the auspices of the S-6. The S-6 Officer argues that the S-6 section is merely responsible for the hardware, the "pipe," and the IT21 authorized software installation. The section has never been a node for software support or development. The debate varies between the Testing Office, which maintains testing data, and the Adjutant's office, the senior personnel officer in the command. The trepidation on the part of the S-6 officer is warranted because the interaction with the data tends to identify SWORD as a decision support system and therefore it would fall under the auspices of the S-6. As was mentioned, the advantages and disadvantages to each section involved in the debate is beyond the scope of this thesis and will be discussed in depth and concluded in the follow-on thesis.

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IV. USER'S MANUAL

A. GETTING STARTED

1. Open an Internet Browser and enter the following Web address:
<http://mcu.nps.navy.mil>
2. An alternative to this is to add to the Favorites list in the Internet Browser or create a shortcut on your desktop:
 - a. Use the following procedures to assist in creating a shortcut.
 1. Select the Favorites Icon on the Tool bar across the top of the Internet Browser Page
 2. Select Add
 3. Select a folder in which to retain the website.
 - b. Use the following to add an icon to your desktop.
 1. Open the Internet Browser.
 2. Select the center icon in the upper right corner of the page to reduce the page size such that the desktop is visible at the edges of the page.
 3. Select the Internet Browser icon with the left mouse button from the navigation window of the browser. See Figure 18.

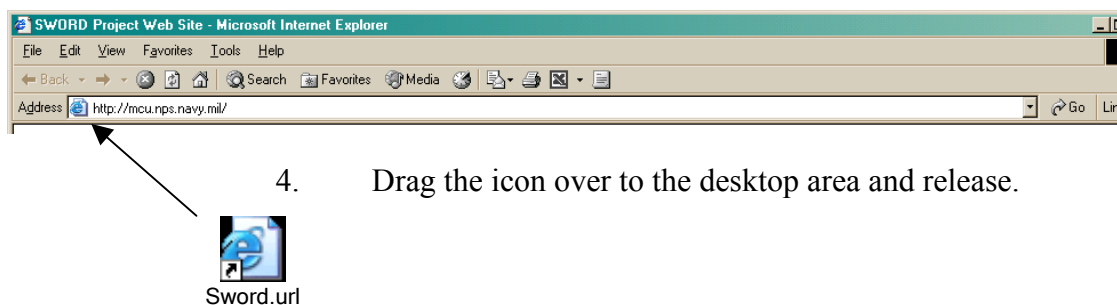


Figure 18. Navigation Bar from the Menu Page

B. SWORD SPLASH PAGE

1. This page is for display purposes and presents general information concerning (see Figure 19):
 - a. Project Definition: SWORD = Schools command Web enabled Officer and enlisted Resource Database.
 - b. Project Proposal Document
 - c. Data Diagram for the database entity relationship diagram.
 - d. Points of contact for the authors.
 - e. A link to the Login page of the prototype website.
2. Select the link to the SWORD Prototype Website and continue.

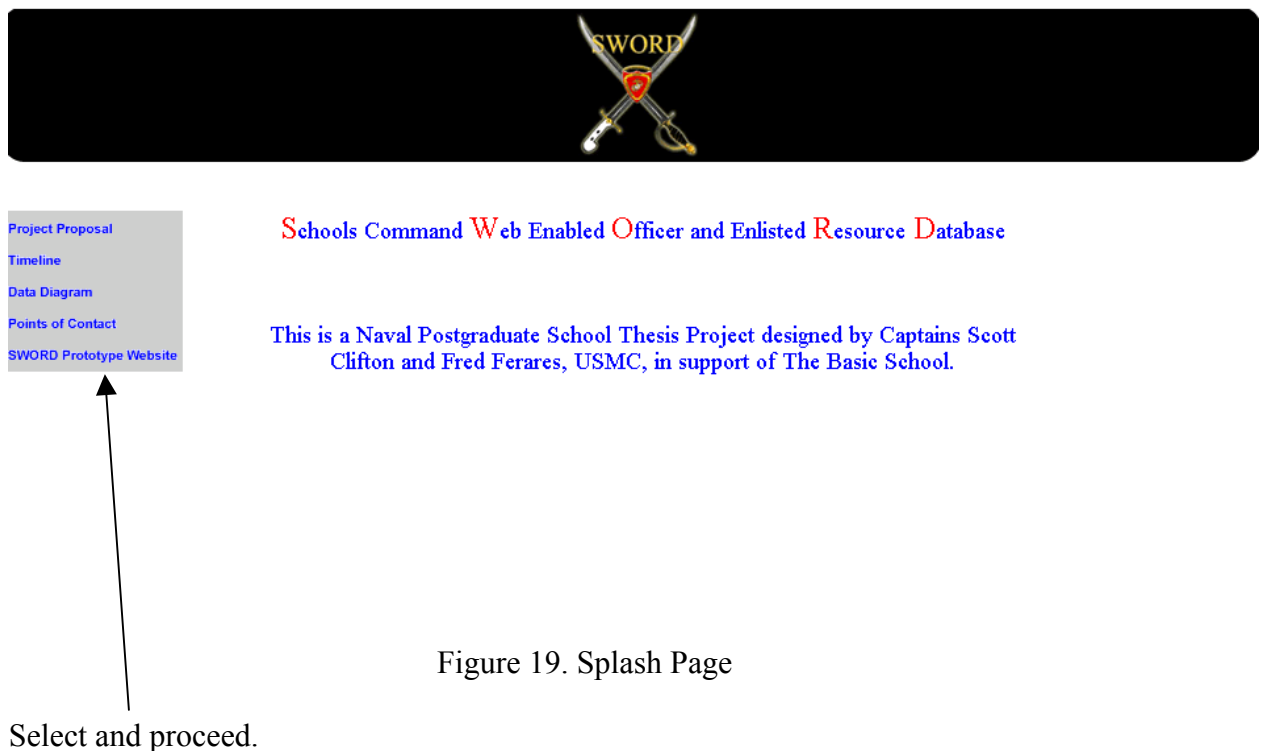


Figure 19. Splash Page

C. LOGIN PAGE

1. The Login page (Figure 20) is the initial access point to the website.
2. The User Name and Password are provided via the Database Administrator.



Please type your user name and password.

User Name

Password

Submit

New User? Click [here](#).


This site is best viewed at 1024 x 768

NOTE: The website has been designed to be viewed at screen resolution: 1024 x 768

Figure 20. Login Page

3. Should the following types of failures occur:
 - a. Username and Password combination not contained in the user database.
 - b. Incorrect Username.
 - c. Password entered incorrectly; note that passwords are case sensitive where the username is not.

The user will be forwarded to the failed login page (Figure 21) where they will be able to attempt to enter the correct username and password combination or return to the main project website.



WARNING

Your login attempt was unsuccessful.

Please re-type your user name and password
or return to the [SWORD Project Web Site](#)

User Name

Password

This site is best viewed at 1024 x 768

Figure 21. Failed Login Page

4. New Users
 - a. The first time a new user accesses the system they should select the New User option and proceed to the New User page.
 - b. This page will allow the new user to enter basic information for the system as well as a username and password. See Figure 22.



Form fields for New User Data Entry:

- Last Name
- First Name
- Middle Initial
- SSN
- Rank: E-1
- Company: Combat Instructor
- Platoon: 1
- User Name
- Password

Buttons: Submit, Reset

Figure 22. New User Data Entry Page

D. MENU PAGE

1. The basic menu page (Figure 23) provides the following options to the user:
 - a. Enter a New Marine – create a new record for a Marine.
 - i. Basic Individual Record – access general information such as Name, Rank, SSN, etc.
 - ii. Basic Training Record – access information relative to the Marine’s professional training such as PFT scores, Weapons qualification, etc.
 - iii. Recall Information – all information relative to contacting the Marine or his dependents.

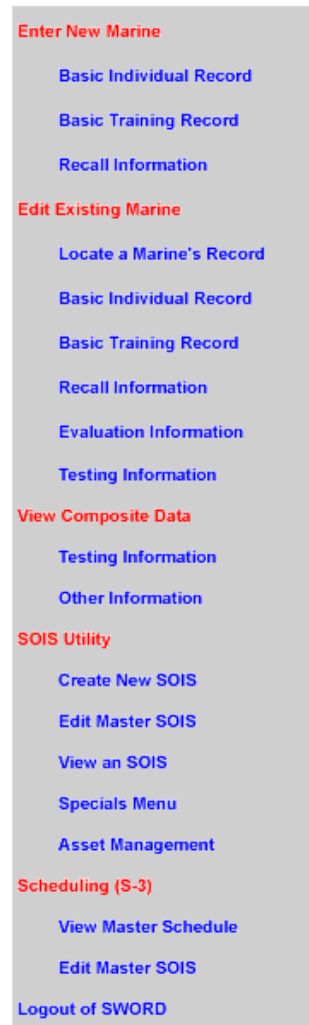


Figure 23. Basic Menu

b. Edit Existing Marine – Update information already contained in the database. This selection will sequence the user through several pages in order to select the specific:

- i. Company
 1. Combat Instructor
 2. Headquarters and Service
 3. Alpha through Echo alphabetically, India, Mike, Combat Instructor and Headquarters & Service.
- ii. Platoon (1 - 6), etc.
- iii. Squad (1 - 3) or Section (S-1, Warfighting, etc)

iv. Marine

NOTE: The focus for the project was on the students so the format for platoon and company structure is similar to that of student companies at TBS. Active Duty Marine Corps units using this system will not have the same format.⁵² For instance, here there are 6 platoons per company.

E. LOCATE A MARINE'S RECORD SEQUENCE

1. The action sequence is visibly identified by following the directions colored in red in the main part of the page for example:

Select a Company

Company Name

Combat Instructor

Headquarters and Service

2. Select Locate a Marine's Record and follow the sequence in order to select the Company, Platoon and Squad for the desired record. See Figure 24.

The screenshot displays the SWORD system interface. At the top, a black banner features the 'SWORD' logo (two crossed swords) and the text 'Current User: Clifton, Scott' in red. Below the banner, the interface is divided into three main sections. On the left, a grey sidebar contains a list of menu items: 'Enter New Marine' (red), 'Basic Individual Record' (blue), 'Basic Training Record' (blue), 'Recall Information' (blue), 'Edit Existing Marine' (red), 'Locate a Marine's Record' (blue), 'Basic Individual Record' (blue), 'Basic Training Record' (blue), 'Recall Information' (blue), 'Evaluation Information' (blue), 'Testing Information' (blue), and 'View Composite Data' (red). The middle section, titled 'Select a Company' in blue, is currently empty. The right section, titled 'Company Name' in blue, lists several options: 'Alpha' (blue), 'Bravo' (blue), 'Charlie' (blue), 'Combat Instructor' (blue), 'Delta' (blue), 'Echo' (blue), 'Fox' (blue), 'Headquarters and Service' (blue), 'India' (blue), and 'Mike' (blue).

⁵² United States Marine Corps doctrine, www.doctrine.usmc.mil.

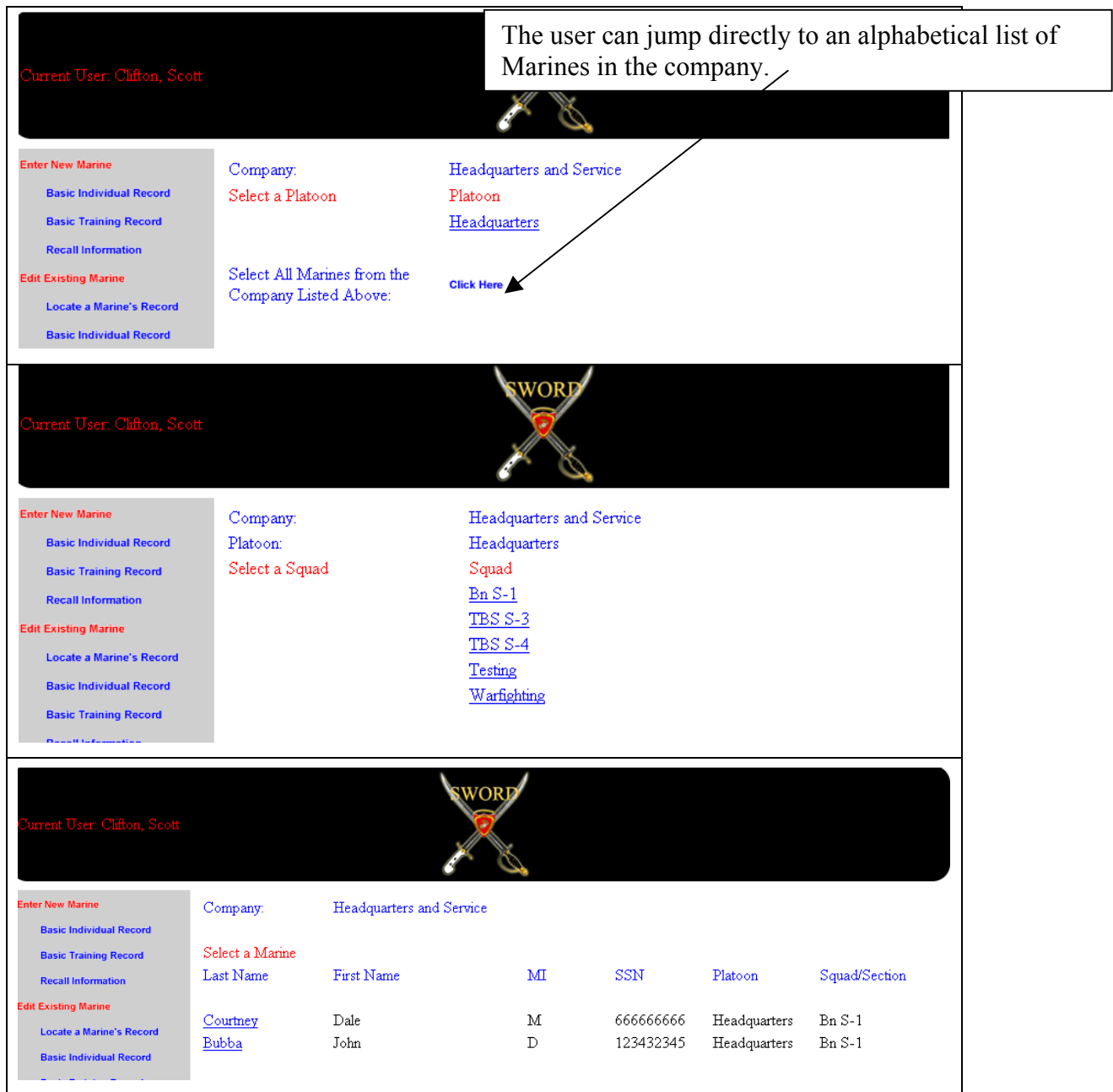



Figure 24. Locate A Marine Page Sequence

3. Once the specific Marine has been located, the user then has the option to select specific pages based on the type of information to be edited. The Basic Individual Record Page is shown in Figure 25.

F. BASIC INDIVIDUAL RECORD (BIR) (Information presented is fictitious)

Current User: Clifton, Scott


Enter New Marine Basic Individual Record Basic Training Record Recall Information Edit Existing Marine Locate a Marine's Record Basic Individual Record Basic Training Record Recall Information Evaluation Information Testing Information View Composite Data Testing Information Other Information SOIS Utility Create New SOIS Edit Master SOIS View an SOIS Specials Menu Asset Management <small>Substitutions (IS 9)</small>	Basic Individual Record <div style="display: flex; justify-content: space-between;"> <div> Last Name <input type="text" value="Butler"/> First Name <input type="text" value="Smedley"/> Middle Initial <input type="text" value="D"/> SSN <input type="text" value="111223333"/> Nickname <input type="text" value="Howie"/> Rank <input type="text" value="E-1"/> Gender <input type="text" value="Male"/> Race <input type="text" value="Caucasian"/> Religion <input type="text" value="Protestant"/> International <input type="checkbox"/> Dependent Status <input type="text" value="Single"/> Date of Birth <input type="text" value="11/10/1980"/> </div> <div> Contract <input type="text" value="Ground"/> College <input type="text" value="USNA"/> Commissioning Source <input type="text" value="Academy"/> AFADB <input type="text" value="5/27/2002"/> PEBD <input type="text" value="5/1/1992"/> DOR <input type="text" value="5/27/2002"/> EAS <input type="text" value="5/27/2006"/> Medical Blood Type <input type="text" value="O Positive"/> Light Duty Records Click Here </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> SWORD Information User Name <input type="text" value="scbutler"/> Password <input type="password" value="AAAAAAAAA"/> Access Level <input type="text" value="1"/> </div> <div> Unit Information Company <input type="text" value="Echo"/> Platoon <input type="text" value="1"/> Squad/Section <input type="text" value="1"/> Fire Team <input type="text" value="1"/> </div> </div>	
---	--	--

Figure 25. Basic Information Record (BIR) Display Page

1. The link to the Light Duty Records Page is located in the right column beneath the medical information.
2. The Light Duty Records Page lists all of the entries for Light Duty contained in the Marine's record book.
3. New entries can be added by inserting the information into the appropriate fields and clicking on the submit button. The user will be returned to the Basic Information Record Page. To confirm the entry simply select the Light Duty Records Click Here button. See Figure 26.

Current User: Clifton, Scott

Enter New Marine

[Basic Individual Record](#)

[Basic Training Record](#)

[Recall Information](#)

Edit Existing Marine

[Locate a Marine's Record](#)

[Basic Individual Record](#)

[Basic Training Record](#)

[Recall Information](#)

[Evaluation Information](#)

[Testing Information](#)

View Composite Data

[Testing Information](#)

[Other Information](#)

SOIS Utility

[Create New SOIS](#)

[Edit Master SOIS](#)

Basic Individual Record (MEDICAL) for Butler, Smedley

Light Duty Records

Start	End	Comments
5/1/2002	5/10/2002	Chronic intoxication.
5/11/2002	5/21/2002	Hang-nail, big toe, left foot.

Add a New Light Duty Record

Start	End	Comments
<input type="text"/>	<input type="text"/>	<input style="width: 90%;" type="text"/>

Figure 26. Light Duty Record Display Page

G. BASIC TRAINING RECORD (BTR)

Current User: Clifton, Scott

Enter New Marine

[Basic Individual Record](#)

[Basic Training Record](#)

[Recall Information](#)

Edit Existing Marine

[Locate a Marine's Record](#)

[Basic Individual Record](#)

[Basic Training Record](#)

[Recall Information](#)

[Evaluation Information](#)

[Testing Information](#)

View Composite Data

[Testing Information](#)

[Other Information](#)

SOIS Utility

[Create New SOIS](#)

[Edit Master SOIS](#)

[View an SOIS](#)

[Specials Menu](#)

[Asset Management](#)

Scheduling (S-3)

[View Master Schedule](#)

[Edit Master SOIS](#)

[Logout of SWORD](#)

Basic Training Record for Butler , Smedley

Rifle Qualification

Date	Score	Classification
<input type="text" value="5/15/2002"/>	<input type="text" value="50"/>	<input type="text" value="Expert"/>

Pistol Qualification

Date	Score	Classification
<input type="text" value="5/15/2002"/>	<input type="text" value="368"/>	<input type="text" value="Expert"/>

PFT

Date	Pull Ups	Crunches	Score
<input type="text" value="5/15/2002"/>	<input type="text" value="5"/>	<input type="text" value="80"/>	<input type="text" value="105"/>

Type

Flexed Arm Hang	Run Time	Classification
<input type="text" value="Initial"/>	<input type="text" value="28:00"/>	<input type="text" value="Failed"/>

Date

Pull Ups	Crunches	Score
<input type="text" value="5/17/2002"/>	<input type="text" value="20"/>	<input type="text" value="98"/>

Type

Flexed Arm Hang	Run Time	Classification
<input type="text" value="Remedial"/>	<input type="text" value="18:32"/>	<input type="text" value="First"/>

Swim Qualification

Date	Classification
<input type="text" value="5/30/2002"/>	<input type="text" value="WSQ"/>

Figure 27. Basic Training Record

- Changes to this page can be made via the Update Record button at the bottom of the page. See Figure 27.

2. Due to the nature of the information on the page, only authorized users will be allowed to make changes to the database.

H. RECALL INFORMATION

The screenshot shows the SWORD system interface. At the top, a black banner displays the SWORD logo (two crossed swords) and the text "Current User: Clifton, Scott". Below the banner, the page title "Recall Information For Butler, Smedley" is centered. On the left is a vertical navigation menu with sections: "Enter New Marine" (Basic Individual Record, Basic Training Record, Recall Information), "Edit Existing Marine" (Locate a Marine's Record, Basic Individual Record, Basic Training Record, Recall Information, Evaluation Information, Testing Information), "View Composite Data" (Testing Information, Other Information), "SOIS Utility" (Create New SOIS, Edit Master SOIS, View an SOIS, Specials Menu, Asset Management), "Scheduling (S-3)" (View Master Schedule, Edit Master SOIS), and "Logout of SWORD". The main content area contains a form for "Type of Address" with a dropdown menu showing "Barracks". Below this are input fields for "Address 1" (O'Bannon Hall), "Address 2" (F200), "City" (Quantico), "State" (VA), "Zip Code" (22134), and "Country" (USA). Navigation arrows (left and right) are positioned above the form fields. At the bottom of the form are "Submit Changes" and "Add a New Address" links, and a "Submit" button. A "Click Here" link is also present at the bottom right.

Figure 28. Recall Information Display Page

1. Those Marines with more than one address in the database, the web page (Figure 28) will be slightly different in that a set of Left and Right arrows will be displayed across the top line so users can move between the addresses.

2. More than one address will not be displayed at once.

I. EVALUATION INFORMATION PAGE

1. The rating matrix across the top of the page is active in that the definition of each rating is displayed when the user places the mouse pointer over that particular rating. As an example, should the user place the cursor over the rating: Unsatisfactory; the following text shown in Figure 29 will appear:

Officers have not met requirements for graduation, failing to demonstrate convincingly the ability to lead, make decisions, take responsibility, and / or learn. Ability to communicate plans, intentions, and information may be inadequately developed. Have not demonstrated a willingness or ability to become students of the profession of arms. Officers may lack confidence or have lost the confidence of their staff and peers. Have routinely been positioned in lower fifth during documented leadership evaluations, billets, tactical billets. Despite weaknesses, these officers have strength of character, desire, and potential to overcome shortcomings, correct deficiencies, and complete requirements of TBS with proper counseling, instruction, and effort.

Figure 29. Unsatisfactory Rating Pop Up Window

Enter New Marine		Chronological Evaluation Information For Butler, Smedley			
Basic Individual Record		Date	Counseling Type	Rating	Comments
Basic Training Record					
Recall Information					
Edit Existing Marine					
Locate a Marine's Record					
Basic Individual Record					
Basic Training Record					
Recall Information					
Evaluation Information					
Testing Information					
New Composite Data					
Testing Information					
Other Information					
SOIS Utility					
Create New SOIS					
Edit Master SOIS					
View an SOIS					
Specials Menu					
Asset Management					
Scheduling (S-3)					
View Master Schedule					
Edit Master SOIS					
Logout of SWORD					

Figure 30. Chronological Record Display Page

2. The ability to Input or View Evaluation information will be determined by the specific user's privilege category.

3. Explain how Figure 30 is connected to Figure 29!

J. VIEW COMPOSITE DATA - Allows the user to compile (view, save, print, etc.) reports on a group of Marines based on specified criteria.

1. Testing Information – i.e. B02500X Communications test failures, etc.
2. Other Information - i.e. number of married Marines, etc.

K. SOIS UTILITY (Not currently active)

1. Create New SOIS
2. Edit Master SOIS
3. View and SOIS
4. Specials Menu
5. Asset Management

L. SCHEDULING (S-3) (Not currently active)

1. View Master Schedule
2. Edit Master SOIS

M. LOGOUT OF SWORD – this option will return the user to the SWORD splash page and cancel the associated session variable.

N. DATABASE MANAGEMENT TOOL

Basic Information Record – this page will allow the administrator to add, delete, or modify any record or entries displayed on the BIR page. The page allows the database manager to enter a variety of data through the use of the main form and a series of subforms accessed by clicking on the tabs in the box located in the lower half of the screen. Sample subforms to enter or modify data are displayed in Figures 31-38 following.

BIR

SWORD

Last Name: International Student: ☐
First Name: Dependent Status:
Nickname:
Middle Initial: User Name:
SSN: Password:
Rank: Access Level:
Date Of Birth:
Gender:
AFADB:
PEBD:
EAS:
DDR:
Contract:
GCT:
Weapon Serial Number:
Weapon Rack Number:
Weapon Lock Number:
Academy Graduate: ☒
Commission Source:
Prior Enlisted Service: ☐
Race:
Religion:
Blood Type:
Previous Command:
RSD Qualified: ☐
RSD Qualification Date:
Company:
Platoon:
Squad or Section:
FireTeam:
Recall Information:
Address Type:
Address 1:
Address 2:
City:
State:
ZipCode:
Country:
Record: 9 of 27

Figure 31. Database Manager Tool: Basic Information Record

1. Address Subform.

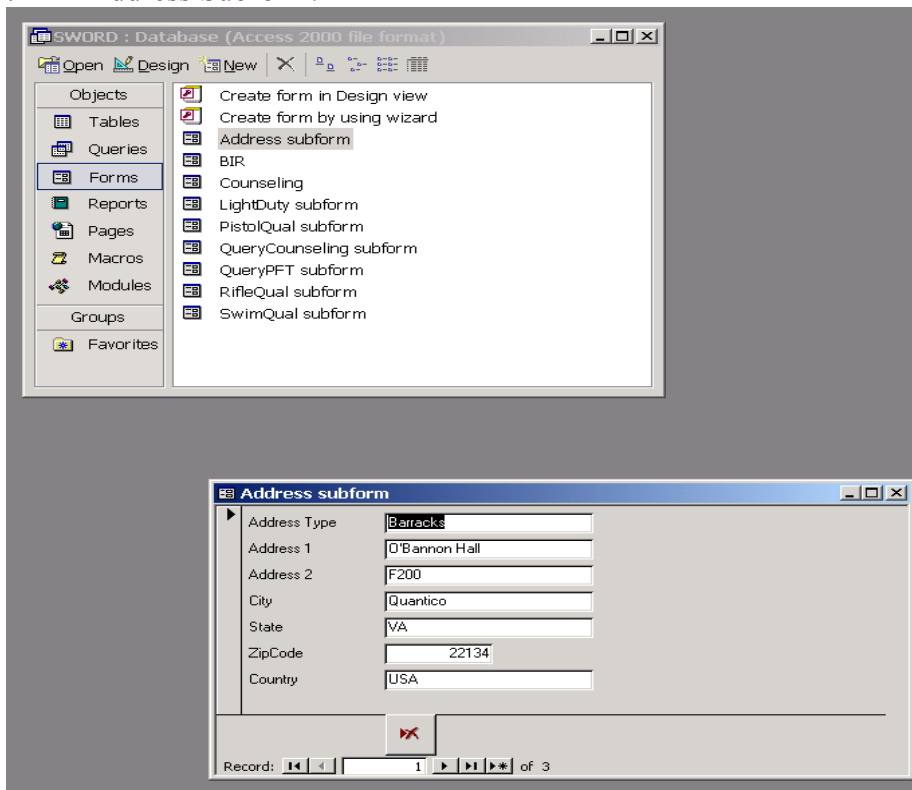


Figure 32. Address Subform

2. Light Duty Records Subform.

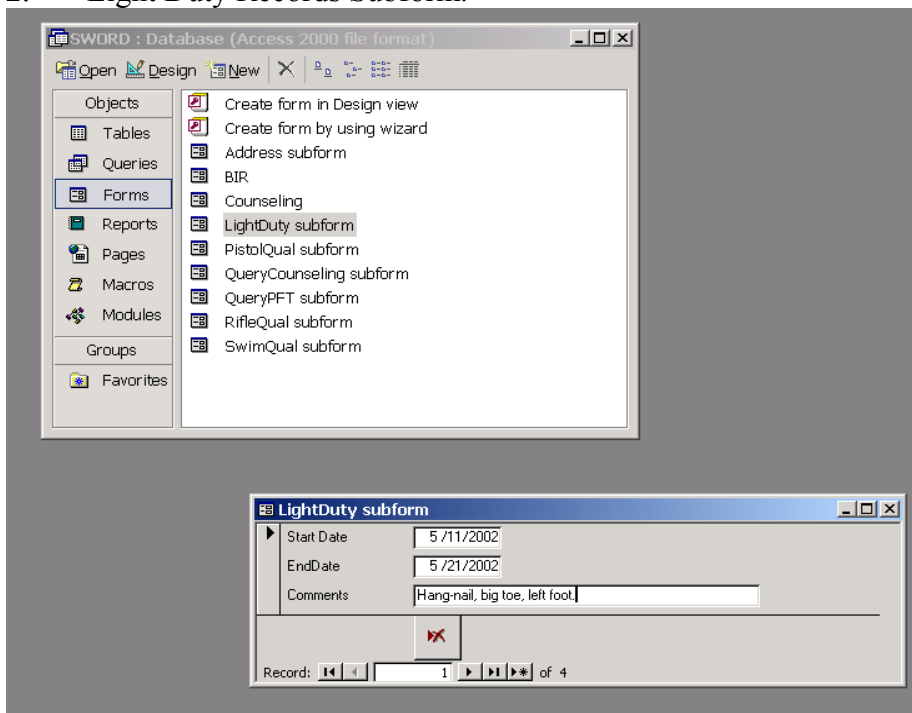


Figure 33. Light Duty Subform

3. Rifle Qualification Subform

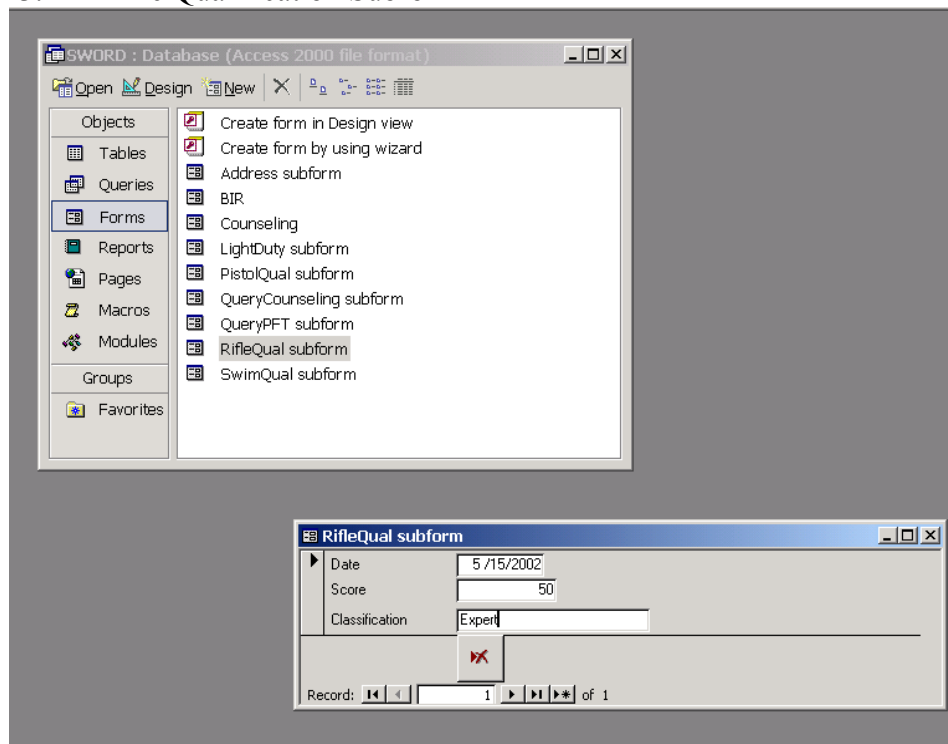


Figure 34. Rifle Qualification Subform

4. Pistol Qualification Subform.

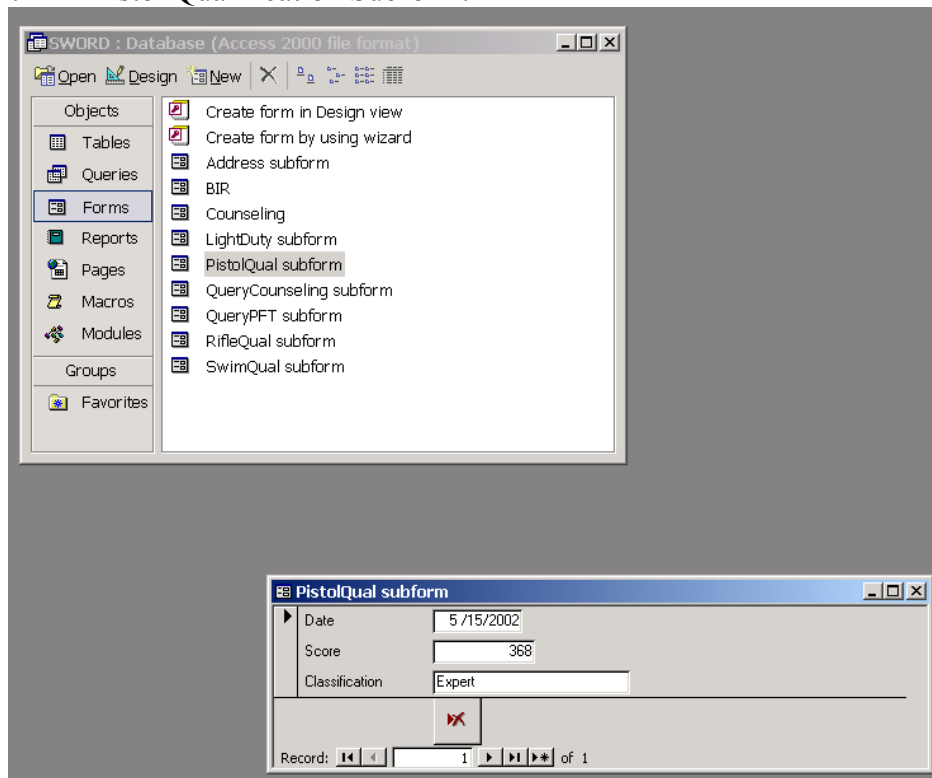


Figure 35. Pistol Qualification Subform

5. Physical Fitness Subform.

The screenshot displays the Microsoft Access interface for the 'SWORD : Database (Access 2000 file format)'. The 'Forms' tab is selected in the left-hand 'Objects' pane. The main window shows a list of forms, including 'QueryPFT subform', which is highlighted. Below this, a preview of the 'QueryPFT subform' is shown. The form contains the following fields and values:

Field	Value
Date	5/15/2002
Type	Initial
Pullups	5
FAH	
Crunches	80
Run	28:00
Score	105
Classification	Failed

The record navigation bar at the bottom indicates 'Record: 1 of 2'.

Figure 36. Physical Fitness Subform

6. Swim Qualification Subform.

The screenshot displays the Microsoft Access interface for the 'SWORD : Database (Access 2000 file format)'. The 'Forms' tab is selected in the left-hand 'Objects' pane. The main window shows a list of forms, including 'SwimQual subform', which is highlighted. Below this, a preview of the 'SwimQual subform' is shown. The form contains the following fields and values:

Field	Value
Date	5/30/2002
SwimQualClass	WSQ

The record navigation bar at the bottom indicates 'Record: 1 of 1'.

Figure 37. Swim Qualification Subform

7. Counseling Subform.

QueryCounseling subform					
Start Date	5 /1 /2002	Billet Description	Student Platoon Commander	Rating	Outstanding
End Date		Counseling Type	Garrison Billet Evaluation	Event	Garrison Billet
Allow Rebuttal	<input type="checkbox"/>	Viewed By Student	<input type="checkbox"/>	EventDescription	
Ranking	1				
Total Ranked	6				
Evaluator's Comment	Demonstrated sound leadership abilities.	Counselor	Ferares	Counseled By SPC	<input type="checkbox"/>
Commander's Comment		Rank			
Decision Making Comment	Good thought process.	Marine's Comment			
Tactical Technical Comment	Firm understanding of TTPs.	Communication Comment	Effective communicator.	Execution Comment	Supervised execution and utilized subordinate leaders.
Leader / Commander Comment		Leader / Commander Comment	Inspirational.		
Inattentive	<input type="checkbox"/>	Negligent Discharge	<input type="checkbox"/>	Unsafe Weapon Turn In	<input type="checkbox"/>
Firing Condition	<input type="checkbox"/>	Firing Outside Safe Limits	<input type="checkbox"/>	Other Safety Violation	<input type="checkbox"/>
Violated Safety Rules	<input type="checkbox"/>	Endangering Flank	<input type="checkbox"/>		
<div> </div>					
Record: 1 of 6					

Figure 38. Counseling Subform

V. RECOMMENDATIONS AND CONCLUSIONS

A. RECOMMENDATIONS

1. Support a follow on project that will include the following:

a. Multiple Marine Thesis submissions. This will allow the thesis team to focus on different areas and still combine into one major project. Possible thesis topics that could collaborate would be an investigation of the appropriate Relational Database Management Systems (RDBMS). This investigation would include a cost-benefit analysis of the different options and conclude with the implementation of that system. Another portion of the thesis team could investigate the different aspects of web and database security necessary and the proper implementation methods to be included in the product. Although these separate areas of research will all combine in the end to produce a working solution, there is potential to research functionality that may not be included but could be investigated. A student could research how to insert a wireless access point for real time data input from the field. This feature would allow the Augment Instructor (AI) to input evaluations in real time from the field instead of taking notes and then transcribing them into the database when the unit returns. This aspect is analogous to an officer or SNCO in the operating forces being able to continue to conduct the day-to-day operations of the unit no matter what their location. It is not necessary for all research that was conducted to become part of the working resource.

b. Define a set of users to be supported by the follow-on project. Identify by name what commands will be supported by the new system. For simplicity the commands could be located at the same Marine Corps installation (i.e., MCB Quantico). Ideally, the commands should originate from different combat elements thus they will have diverse data requirements. This is meant to ensure that the new system does not focus support only those units in the Combat Service Support Element (CSSE) or the Aviation Combat Element (ACE) but could be used by different communities. An example of a diverse set of commands could be Officer Candidate School (OCS), Marine Helicopter Squadron One (HMX-1), MCAF Quantico, and possibly one specific section of MARCORSYSCOM. Once identified, the thesis team could work to define a specific data model that is common to all the commands.

c. Identify the scope of the project to preclude resistance. During the initial requirements definition phase, minor resistance was encountered from the civilian employee whose job it is to maintain the MCAIMS database.⁵³ This particular database is useful but not very user friendly nor does it provide the visibility of the data normally desired by commands on a day-to-day basis. The scope of the follow-on project should be defined as being a complement to systems such as MCAIMS and BNA in that a better interaction system could be created that would draw information from MCAIMS and BNA vice replace them. In time, as determined by MARCORSYSCOM, it could be possible to replace these databases with an all-encompassing data resource; but this would be a major undertaking and most likely not the work of a small team of thesis students but a larger group or contractors working from the data models, requirements, and recommendations of this and follow-on theses.

d. Include triggers for actions. In the event of multiple failures or consistently low scores (as well as significantly high scores), the Testing Officer or SPC should receive a pre-formatted email notifying him/her of the occurrence and the suggested action. This function could be extended to the Student Performance Review Board members to notify them of an upcoming review board. It should be noted that it is not the intent of this system to create a system of “leadership via email” where the SPC is notified and then passes information on electronically. The interaction between the SPC and his Marines is to be maintained but some functions can be made more efficient through automation.

e. Insert a digital picture of each Marine. All of the records retained in the database should include a digital picture of the Marine. The location can be at the discretion of the follow-on team but a suggestion would be to display the pictures adjacent to the names of the Marines when searching for a specific name. This picture would then be carried forward to the BIR page.

f. Incorporate a Student Performance Review Board web page. This would be a separate web page, activated as required by the Administrator that would

⁵³ Reference a conversation in October 2001, the gentlemen was opposed to the idea of the resource because it would be in conflict with his database and thus his current employment. No malice was involved and the meeting concluded with good suggestions on how to progress.

query the database for the necessary information. Those officers assigned to the SPRB GROUP would have access to the information based on a separate username and password combination. During the majority of the time that a SPRB is not required, the page would be disabled. This page would negate the need for the Testing Officer to compile information and photocopy it for each member of the SPRB.

g. *Marine Corps Lessons Learned (MCLLS).* Incorporate an area that can be updated by either the company staff or the student billet holders where at the completion of an event the lessons learned for that unit are entered. This was a suggestion from the student forum conducted with the most senior student company on deck during the prototype demonstration. The idea is that each company makes certain mistakes during each event, why not post those mistakes for the next company from which to learn. This is the same idea that the operational forces use when MCLLS are submitted after each major exercise. The intent is not for each student company to learn “all the tricks” and not learn anything new during the event, but it would prevent “reinventing the wheel” every time a company attempts an event.

h. *Student memo for personnel MCLLS.* As was stated above, the students proposed the idea of an area in the resource where they could document personnel lessons learned in regards to an individual counseling or a student staff billet. Some lessons learned such as those for student staff billet could be made visible to all students so that they could learn from others experiences and be better prepared for their billet. This functionality implies a wider range of interaction between the student and the database than was first envisioned; but this is a good suggestion and it is a natural progression especially if one of the arguments is to educate the students with emergent technology.

i. *Migrate the data to a Relational Database Management System (RDBMS).* The proof of concept to demonstrate a new way of conducting business at TBS used Microsoft Access for the database and Microsoft Visio for the data modeling tool. Both of these programs are limited in their functionality and their abilities (especially Access) concerning multiple simultaneous users.⁵⁴ Both of these tools were

⁵⁴ <http://www.macromedia.com/v1/handlers/index.cfm?ID=1540&Method=Full>

adequate for the purpose of the prototype and were not meant to imply that they should be used again for the pilot test. The follow-on thesis should thoroughly research the available RDBMS solutions to determine the best course of action for the next version of the resource. This research should include a cost-benefit analysis and an in-depth study of the resident systems and applications for any interoperability issues.

j. NMCI Interaction. Currently the Navy-Marine Corps Intranet does not list Dreamweaver (with UltraDev 4) and Fireworks as authorized programs. This thesis was completed using those tools due to the ease of use and advanced functionality when compared to Microsoft FrontPage. The follow-on thesis should include an investigation of the requirements for a waiver in order to use these programs inside the NMCI contract.⁵⁵

k. Define the archive plan and 'paperless' office scenario. Currently, TBS retains copies of the 'green jackets' for three years in the basement of the headquarters building. After three years, the volumes of documents are moved to the archive area at Marine Corps University (MCU)⁵⁶. Set a goal for the resource to utilize an electronic archive at MCU with the SPC and Company Staff retaining only those paper copies of documents for specific purposes until the company graduates. After the company graduates, destroy the paper copies to not duplicate data. Since it is electronic, the archives can be accessed as required or reside there indefinitely.

2. Formally create a relationship between the Naval Postgraduate School and other Department of Defense Schools

During the course of the research and development of this thesis, a positive outcome was seen in the creation of a working relationship between staff officers at TBS and students at the Naval Postgraduate School. This is a mutually supporting relationship because NPS has a continual need to produce theses and conduct research where TBS and commands like it are limited by funding but have a need for technological advances.

This relationship will continue to flourish as the follow-on project continues as well any spin offs that occur. This relationship should be formalized and expanded to

⁵⁵ http://www.eds.com/nmci/Gold_disk_contents_11.doc NMCI website.

⁵⁶ Reference a conversation with Capt Ken Owens

include more than just 'free' intellectual capital in the form of thesis research but hardware and software support as well. NPS could be considered a 'rich' command in that it is possible to walk through the spaces and see newer computer hardware than was resident a few months prior. The hardware that was replaced should be offered to Department of Defense (DOD) schools first; and then if not desired, sent to the Defense Reutilization Management Office (DRMO). In this way, the supported school has the benefit of acquiring computer assets that it may not have had the funding for previously and NPS is able to foster its relationship with other commands. A problem with NPS currently is that it is one of the best-kept and most misunderstood secrets in the military. A relationship of intellectual and technological support would be free advertising to the fleet and would keep NPS in the minds of the supported personnel.

B. CONCLUSIONS

At the outset, the idea was to create a working prototype for TBS to use; that prototype would revolutionize the entrenched mindsets resident at the school. It was to be a classic example of the application of technology to make a business process more efficient. The result is a working proof of concept that is regarded as a good first step and will become the impetus for change at TBS. The data model and the discussion points will be the basis for a follow-on project that will build on this prototype and carry it through the pilot test program and fault testing. The follow-on thesis will decide upon the best vendor to choose to migrate the data model as well as find a solution to the debate concerning the maintenance of the resource.

The mindset that a system of this type is unnecessary remains entrenched at TBS, and may never change. In time a web resource of this type will become the standard for personnel administration and any subsequent changes to this archetype will be a paradigm shift away from which a future generation of change agents will have to overcome.

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LIST OF REFERENCES

- Beer, Michael, "Leading Change" as a note for class discussion at Harvard Business School, 1988.
- Blackburn, Ian; Dewson, Robin; Hanselman, Scott; et. al., Professional Access 2000 Programming, Wrox Press Ltd., 2000
- Bryant, Don, "The Psychology of Resistance to Change", Management Services, March 1979.
- DeAngelis, M. Carla, Data Modeling with ERwin, Sams Publishing, 2000.
- Green, Garo, Dreamweaver 4 H.O.T. Hands-On-Training, Peachpit Press, 2002
- Gregory, William W., and Michael C. Reingruber, The Data Modeling Handbook: A Best-Practice Approach to Building Quality Data Models, John Wiley & Sons, 1994.
- Jick, Todd D., "The Challenge of Change" as a note for class discussion at Harvard Business School, 1990.
- Kroenke, David M., Database Processing: Fundamentals, Design & Implementation 7th Ed., Prentice Hall, Upper Saddle River, New Jersey, 2000
- Kotter, John P., "Leading Change: Why Transformation Efforts Fail", Harvard Business Review, March-April 1995.
- Kotter, John P., and Leonard A. Schlesinger, "Choosing Strategies for Change", adapted from a chapter in a book yet to be published at the time of the article.
- Larman, Craig, Applying UML and Patterns, Prentice Hall, Inc., 1998.
- Loden, Marilyn, Implementing Diversity, McGraw Hill, 1996.
- Macromedia.com "Using Microsoft Access Databases in a Production Environment" <http://www.macromedia.com/v1/handlers/index.cfm?ID=1540&Method=Full>, 2002.
- "Moving With Movex" Movex Inc. Web Site, [<http://www.movex.net/>]. April 2002
- Navy and Marine Corps Intranet website, [<http://www.eds.com/nmci.htm>] June 2002
- "Official Website for the United States Marine Corps" United States Marine Corps Web Site, [<http://www.usmc.mil/>]. April 2002
- Ray, John, Sams Teach Yourself Dreamweaver UltraDev 4 in 21 Days, Sams, 2001

Senge, Peter M., The Fifth Discipline: The Art & Practice of the Learning Organization, Doubleday, New York, 1990.

“Smartdraw.com – Graphics software for business charts and digital photos”
Smartdraw.com Web Site, [<http://www.smartdraw.com/>]. May 2002

Smith, Robert; Sussman, David, Beginning Access 2000 VBA, Wrox Press Ltd., 1999

West, Ray; Muck, Tom; Allen, Tom, Dreamweaver UltraDev 4, Osborne/McGraw-Hill, 2001

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APPENDIX B: TBS FORMS AND REPORTS

A. STUDENT INTERVIEW RECORD, STANDARD

STUDENT INTERVIEW RECORD

DATE:

NAME: 2NDLT

BASIC CLASS: 5-00

PLATOON:

REASON FOR INTERVIEW

STAFF OFFICER'S STATEMENT:

I do not desire to attach a statement.

I do desire to attach a statement:_____

Officer Student

Staff Officer

B. STUDENT INTERVIEW RECORD, SUBSTANDARD PERFORMANCE

STUDENT INTERVIEW RECORD

DATE _____

NAME _____ BASIC CLASS _____ PLATOON _____

REASON FOR INTERVIEW

SUBSTANDARD PERFORMANCE / MINOR INFRACTION

STAFF OFFICER'S STATEMENT:

SNO was advised that performance and/or actions of this nature is/are not consistent with those minimum standards normally expected of Marine officers, and that such performance/actions, if repeated will have a negative effect upon his/her success at TBS.

I do not desire to attach a statement.

I do desire to attach a statement: _____

Officer Student

Staff Officer

C. STUDENT INTERVIEW RECORD, FAILURE OF AN EVENT

STUDENT INTERVIEW RECORD

DATE: 010316

NAME: WO

BASIC CLASS: WOBC-01

PLATOON: 5

REASON FOR INTERVIEW

Substandard Performance/Failure of the Land Navigation III exercise. SNO was assigned to land nav remediation effective immediately. SNO was advised of her/his deficiency and informed of the importance of being able to land navigate with respect to being a Marine officer and leading Marines in any MOS. SNO was advised to seek help from the company and platoon navigation representative or her/his SPC. SNO was advised that he/she must maintain at least a 75% on military skills in order to pass the Basic Officer Course.

SNO's score_____

I do not desire to attach a statement.

I do desire to attach a statement:_____

Officer Student

Staff Officer

D. STUDENT INTERVIEW RECORD, INITIAL INTERVIEW

Initial Interview

SNO Name _____ SSN _____

Questions gleaned from "Autobiography" and observation

Interview date _____

Comments:

Recommendations for SNO action:

I have read and will carry out the recommendations for SNO action.

SNO Signature

E. TBS STUDENT EVALUATION FORM

II. TBS Student Evaluation Form

Name:	Company:	Date:	Billet:
AI:	Event:		
Overall performance with regard to SNO potential, experience, and situation			
Unsat.....Poor.....Fair.....Good.....Excellent.....Outstanding _____			

Decision-Making (SNO's mission analysis, estimate of the situation, and the creation of a detailed plan that puts the enemy in a dilemma and exploits critical vulnerabilities revealed in SNO's estimate. Has SNO considered reconnaissance? Has SNO considered combined/supporting arms?)

Communication (Is SNO able to utilize the orders process to communicate his/her plan? Are his/her tasking statements detailed enough to allow subordinates to execute? Is SNO able to communicate directly w/subordinates using the terrain model or does he/she read from notes? Does SNO have command presence? Does SNO exhibit force in his/her leadership role)

Execution (Did or did not SNO accomplish the mission? Did the unit accomplish the mission in spite of or because of SNO's leadership? Did or did not SNO fulfil Commander's Intent? If the situation changed and the mission became irrelevant, did SNO use Intent to guide decisions? Explain)

Leader/Commander (Ability of SNO to inspire his/her subordinates through force of will and/or strength of character. Did SNO demonstrate high moral standards reflecting virtue, honor, patriotism, and subordination in personal behavior and performance? Did SNO impact troop welfare following mission accomplishment?)

Tactical/Technical Proficiency. (Did SNO demonstrate a level of understanding of the material commensurate with the level of instruction. Has SNO demonstrated the ability to learn from his/her mistakes or the mistakes of others, quality of participation in the Critique. Describe SNO's tactical leadership ability relative to his/her stage of training in the POI)

F. CRITERIA FOR EVALUATION RATINGS

Out- Standing	Given to officer students displaying outstanding leadership skills, unwavering character, and unlimited growth potential. Officer student's abilities clearly above the rest of the company, above that of officers in most companies. Officers' services would be actively sought for combat duties. Consistently made sound decisions, communicated with clarity, set a noteworthy example, and demonstrated initiative, toughness, and maturity. Understands and lives the meaning of commission—the officer's role as a public figure and the duties and responsibilities inherent in command. Has established the reading and analytical habits of a life long scholar of the profession of arms. A true professional, capable of the most demanding assignments with the Operating Forces.
	Clearly the best officers in the company. Have exhibited strong character and morally guided judgment. Have demonstrated noteworthy, competent leadership in garrison and in the field. Officers have demonstrated ability to think, communicate, lead, take charge. They show wisdom and instincts beyond their level of experience. Officers' performance consistently falls in the top fifth of officers in the company, without exception. Has established the reading and analytical habits of a life long student of the profession of arms. The small numbers of officers receiving these scores attest to their superior leadership abilities and potential relative to their peers.
Excellent	Excellent leadership performance throughout the course, routinely in the top fifth for all documented evaluations. No negative trends or problem areas. Officers are capable of handling difficult assignments with minimal supervision. Possess well developed warfighting and communications skills and have demonstrated a bias for action. Officers make decisions based on unwavering moral compass. Have attacked TBS duties with the thirst of a life-long learner in the profession of arms. Officers with these grades have confidence in their abilities and understand clearly the meaning of their commissions, carry themselves as public figures, and exhibit exemplary conduct and self control.
Good	Solid, consistent leadership performance throughout the course. Officer students in this category have demonstrated leadership proficiency in all subject areas. Students have made predictable errors born of inexperience or incomplete knowledge but have learned from mistakes and avoided similar errors. Possess sound moral instincts and character. Officers will unquestionably be able to perform every anticipated assignment with the operating forces, including combat, with normal supervision and guidance.
Fair	Capable leaders and wholly trustworthy. Performance at TBS may have been inconsistent, but corrected after counseling and corrective action. Often learn lessons the hard way, but learn nonetheless. Leadership difficulties due to inexperience, lack of knowledge, poor study skills, NOT a lack of effort or inattention. Despite errors, these officers nonetheless possess sound moral instincts and can be relied upon to work hard, improve, apply experience, and seek assistance when required. Weak areas are compensated by strengths in other areas.
Poor	Officer students have met minimum standards required for graduation and are capable of leading Marines. Officers may have learned more slowly than their peers, or performed poorly in early field or garrison billets. May have lacked confidence early in the course. Officers routinely were rated in the lower two fifths relative to their peers on documented leadership evaluations, but performed well enough to retain the confidence of their staff, AIs, and peers. Despite difficulties, these officers possess the character required to lead Marines and are guided by sound moral instincts. Weak areas identified over the course have been addressed and satisfactorily overcome. Remaining weaknesses offset by other strengths. Despite low leadership score, staff is nonetheless confident that these officers will be competent professionals and leaders.
Unsat	Officers have not met requirements for graduation, failing to demonstrate convincingly the ability to lead, make decisions, take responsibility, and / or learn. Ability to communicate plans, intentions, and information may be inadequately developed. Have not demonstrated a willingness or ability to become students of the profession of arms. Officers may lack confidence or have lost the confidence of their staff and peers. Have routinely been positioned in lower fifth during documented leadership evaluations, billets, tactical billets. Despite weaknesses, these officers have strength of character, desire, and potential to overcome shortcomings, correct deficiencies, and complete requirements of TBS with proper counseling, instruction, and effort.
	Officers have not met requirements for graduation, failing to demonstrate convincingly the ability to lead, make decisions, take responsibility, and / or learn. May have had incidents of events that reflect negatively on the officer's character or have demonstrated lapses in moral judgment. Ability to communicate plans, intentions, and information may be inadequately developed. Officers may lack confidence or have lost the confidence of their staff and peers. Have routinely been positioned in lower fifth during documented leadership evaluations, billets, tactical billets, or have performed without a billet in a manner that demonstrates poor leadership abilities or potential. Officers assigned grades this low have limited potential for passing either the BOC or WOBC, regardless of the amount of energy invested in their reclamation.

	Officer has not met leadership requirements for graduation and does not possess the abilities, desire, or professionalism to overcome deficiencies, regardless of the amount of time or energy invested in corrective action. Lacking in character or moral judgment. Officer students who are either incapable or unwilling to lead, or have compromised their moral authority to lead, should be assigned grades this low.
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G. EXAM ADVANCE SHEET, BASIC OFFICER COURSE

UNITED STATES MARINE CORPS MARINE CORPS COMBAT DEVELOPMENT COMMAND QUANTICO, VIRGINIA 22134-5086

BASIC OFFICER COURSE –EXAM ADVANCE SHEET (WITH TDM)

Academic Events

	<u>Weight</u>	X	<u>Grade</u>	<u>Score</u>
B0321X ENGINEERING/NBC/AVIATION	3		_____	_____
B0359X DEFENSE	4		_____	_____
B0362X PATROLLING (WRITTEN & PRAC)	3		_____	_____
B0398X OFFENSE	4		_____	_____
B0791X BASIC SKILLS	4		_____	_____
B0792X LEADERSHIP & ADMINISTRATION	4		_____	_____
B0793X EXPEDITIONARY OPERATIONS	3		_____	_____
B0859X COMBINED ARMS (WRITTEN & PRAC)	4		_____	_____
B4400X MILITARY LAW	2		_____	_____
B6602X WRITING SKILLS	<u>1</u>		_____	_____
<i>Academic Sub-total</i>	32			

Leadership Events

B0795X 1ST LEADERSHIP EVALUATION	14		_____	_____
B0796X 2ND LEADERSHIP EVALUATION	<u>22</u>		_____	_____
<i>Leadership Sub-total</i>	36			

Military Skills Events

B0101X FITNESS REPORT	2		_____	_____
B0191X TECHNIQUES OF MILITARY INSTRUCTION	2		_____	_____
B0344X COMBAT ORDERS FORMAT	1		_____	_____
B0368X TACTICAL DECISION MAKING	4		_____	_____
B1460X NIGHT NAVIGATION FINAL	1		_____	_____
B1470X LAND NAVIGATION	2		_____	_____
B1485X LAND NAVIGATION FINAL EXERCISE	3		_____	_____
B2140X WEAPONS PRACTICAL	4		_____	_____
B2291X RIFLE QUALIFICATION	2		_____	_____
B2292X PISTOL QUALIFICATION	2		_____	_____
B2500X COMMUNICATIONS	2		_____	_____
B8400X PHYSICAL FITNESS TEST	1		_____	_____
B8493X OBSTACLE COURSE	1		_____	_____
B8494X ENDURANCE COURSE	2		_____	_____
B8599X DRILL EVALUATION	2		_____	_____
B8605X FIRST AID EVALUATION (WRITTEN & PRAC.)	<u>1</u>		_____	_____
<i>Military Skills Sub-tot</i>	32			

(Academic Sub-total* 0.32) + (Leadership Sub-total * 0.36) + (Military Skills Sub-total * 0.32) =
Total Grade

H. EXAM ADVANCE SHEET, WARRANT OFFICER BASIC COURSE

UNITED STATES MARINE CORPS
MARINE CORPS COMBAT DEVELOPMENT COMMAND
QUANTICO, VIRGINIA 22134-5086

COMPANY I
2002010 / M02RMN4

Academic Events

	<u>Weight</u>	X	<u>Grade</u>	<u>Score</u>
W0100X PERSONNEL AND GENERAL ADMIN	6		_____	_____
W0359X DEFENSE AND PATROLLING	7		_____	_____
W0791X BASIC SKILLS	5		_____	_____
B0859X COMBINED ARMS	7		_____	_____
B4400X MILITARY LAW	4		_____	_____
B6602X WRITING SKILLS	3		_____	_____
<i>Academic Sub-total</i>	32			

Leadership Events

W0795X COMMAND EVALUATION	<u>36</u>		_____	_____
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Military Skills Events

B0101X FITNESS REPORT	4		_____	_____
B0344X COMBAT ORDERS FORMAT	3		_____	_____
W0368X TACTICAL DECISION MAKING	5		_____	_____
B1470X LAND NAVIGATION WRITTEN	4		_____	_____
B1485X LAND NAVIGATION FINAL	5		_____	_____
B2500X COMMUNICATIONS	4		_____	_____
B8400X PHYSICAL FITNESS TEST	3		_____	_____
B8494X ENDURANCE COURSE	<u>4</u>		_____	_____
<i>Military Skills Sub-total</i>	32			

(Academic Sub-total * 0.32) + (Leadership Sub-total * 0.36) + (Military Skills Sub-total * 0.32) =
Total Grade

I. STUDENT INTERVIEW RECORD, SAFETY VIOLATION CHIT

SAFETY VIOLATOR POLICY

1. Any Marine who violates a safety regulation, rule or standard will sign this chit and will be immediately counseled by the officer observing the violation.
2. Safety standards will be strictly followed at all time: live fire, training area, and company area.
3. The chit will be routed per instruction on this card.
4. Subsequent violations may result in a student performance review board as directed by the company commander.

SAFETY VIOLATION CHIT

INATTENTIVE DURING SAFETY BRIEF-----	[]
FOUR BASIC SAFETY RULES-----	[]
WEAPON NOT IN APPROPRIATE FIRING CONDITION-----	[]
NEGLIGENT DISCHARGE-----	[X]
FIRING OUTSIDE THE SAFETY LIMITS-----	[]
FIRING ENDANGERING THE MARINES ON YOUR FLANKS-----	[]
UNSAFE WEAPON TURN-IN-----	[]
OTHER-----	[]

REMARK: (continue on back if necessary)

During BZO, SNO had a negligent discharge with the M249 Squad Automatic Weapon. SNO attempted to pull the charging handle to the rear while the weapon was on "SAFE." SNO's hand slipped, the bolt was sent home, and the machine gun expended one round. SNO is instructed to re-familiarize himself with the weapons conditions and loading/clearing/misfire/stoppage procedures for this weapon system. SNO is required to write an after action report on the events surrounding this occurrence (due at on deck time Monday 09 Apr 01).

<u>WO R. D. Ramsey Jr.</u>	<u>417 15 0225</u>	_____	_____
STUDENT NAME	SSN	SIGNATURE	TIME

SPC NAME: Capt K. G. Owens

COMPANY/PLT: I/5 FIELD PROBLEM: R-5 Squad live fire DATE: 010404

REQUIRED ROUTING (BY COB) (INITIAL/TIME/DATE)

1. RSO/PRIMARY: _____
2. SPC: _____
3. CO CMDR: _____
4. TBS SAFETY OFFICER: _____
5. TBS S-3: _____
6. TBS CO: _____

7. PLACE IN STUDENT RECORD

(1 copy on file at TBS Safety & 1 copy in the student's company record)

J. STUDENT INTERVIEW RECORD, CHRONOLOGICAL FAILURE OF ACADEMIC/MILITARY SKILLS EXAMS FAILURE OF ACADEMIC / MILITARY SKILLS EXAMINATION

Name _____ Basic _____ Platoon _____
 _____ Class _____

STAFF OFFICER'S STATEMENT

SNO was formally counseled concerning his/her failure to pass academic/military skills examinations and was placed on platoon probation. To successfully complete the Basic Officer's Course the officer must achieve a passing grade of 70% on all academic and military skills examinations. The student must also achieve an overall average grade of 75% in the Academic, Military Skills and Leadership categories. An officer who fails to score 70% or higher on any **Academic Evaluation** will be re-tested until a passing grade is achieved. A grade of 60% or the original failing grade, whichever is higher, will be assigned for that evaluation. Failures on any Military Skills event will be re-tested until the 24th week so that a passing grade of 70% can be attained. In addition, every officer must achieve a minimum swim qualification of CWS-2 by the 24th week. An Officer Student who fails three primary academic or military skills examinations or any academic subjects retest may, at the Company Commander's discretion, be referred to a TBS Student Performance Review Board (SPRB). SNO understands that further substandard performance academically will be looked upon unfavorably and could result in probation, reassignment to another company, or a recommendation by the CO TBS proposing separation of the Officer Student from the Marine Corps.

<u>Exam</u>	<u>Date</u>	<u>Score</u>	<u>Student</u>	<u>Staff</u>	<u>Statement</u>
_____	_____	_____	_____	_____	Y / N
_____	_____	_____	_____	_____	Y / N
_____	_____	_____	_____	_____	Y / N
_____	_____	_____	_____	_____	Y / N
_____	_____	_____	_____	_____	Y / N
_____	_____	_____	_____	_____	Y / N

K. MOS SELECTION INFORMATION

MOS SELECTION (INFORMATION)

** Failure to follow instructions will jeopardize your chances of getting the MOS and/or Duty Station you desire.

REQUIREMENTS FOR EACH MOS:

MOS	MOS DESCRIPTION	SPECIAL REQUIREMENTS
0180	Adjutant	
0203	Ground Intelligence	Male / Able to receive a Top Secret Clearance
0204	Human Intelligence	Male / Able to receive a Top Secret Clearance
0206	Signals Intelligence	Able to receive a Top Secret Clearance
0207	Aviation Intelligence	Able to receive a Top Secret Clearance
0302	Infantry	Male
0402	Logistics	
0602	Communications / Info Systems	
0802	Artillery	Male
1302	Engineer	
1802	Armor / Tanks	Male
1803	Amphibious Armored Vehicles	Male / CWS-1
3002	Ground Supply	
3404	Financial Management	
4302	Public Affairs	
5803	Military Police	
6002	Aviation Maintenance Officer	
6602	Aviation Supply	
7208	Air Support Control	Male only for the Surface-to-Air side of the MOS
7210	Air Defense Control	Normal Color Vision
7220	Air Traffic Control	Medically Qualified (Flight Physical)
7599	Student Naval Aviator	Passed ASTB (Qualified for Pilot) / CWS-1 / Medically Qualified
7580	Student Naval Flight Officer	Passed ASTB (Qualified for NFO) / CWS-1 / Medically Qualified

1) There is NO requirement to place a Non-Combat Arms MOS in any specific place on your list (e.g. in the top 3) nor is there a requirement to place a Combat Arms MOS in any specific place. Put the MOSs on your card in the exact order you want them.

2) Females will NOT place the following MOSS on their MOS Cards.

0203 Ground Intelligence	0802 Artillery
0204 Human Intelligence	1802 Armor / Tanks
0302 Infantry	1803 AAVs

L. MOS CARDS

MOS CARDS

EVERYONE WILL SUBMIT TWO CARDS

(1- SPCs, 1- XO) Card size - 3 x 5

FRONT

-Top line -Last Name, First Name, MI.SSN Current MOS (9901, 7599, 7580, 4401)

- Following Lines - Choice Number then MOS Choices (Listed in order of preference) [e.g. **1) 0302 Infantry**]

List as shown below:

0180 Adjutant	0802 Artillery	6002 Av. Maint
0203 Grnd Intel	1302 Engineer	6602 Av. Supply
0204 Hum Intel	1802 Tanks	7208 Air Spt
0206 Sig Intel	1803 AAV	7210 Air Def
0207 Air Intel	3002 Supply	7220 ATC
0302 Infantry	3404 Fin Mngmt	7580 NFO
0402 Logistics	4302 Pub Affairs	7599 Pilot
0602 Comm	5803 MP	

- Bottom Right Hand Corner - Platoon Number (Circled)

* All MOSs that you qualify WILL be listed. If you are qualified for NFO and/or Pilot but do not desire it. . put it last - but you must list it. - Female: 15 -17 MOSS (15 if unqual for pilot or NFO) -Male: 21- 23 MOSs (23 if qual for both pilot and NFO)

BACK

- In order of precedence list: East Coast, West Coast, Hawaii, or Overseas * After Overseas - If you are married (or plan to be married at the time of PCSing) list your desire to go Accompanied (with family members) or Unaccompanied (without family members).
- List any Special Considerations that should be considered for geographical assignment (e.g. specific family member issues, spouses duty station if active duty, etc.)

FRONT

Benatz, John. P. 123 45 6789 9901

1) 1802 Tanks	10) 6002 Air Maint	19) 7208 Air Support
2) 1803 AAV	11) 0302 Infantry	20) 4302 Pub Affair
3) 0402 Logistics	12) 0203 Grnd Intel	21) 0207 Air Intel
4) 0602 Comm	13) 0204 Hum Intel	22) 7580 NFO
5) 0802 Artillery	14) 0206 Sig Intel	23) 7599 Pilot
6) 5803 MP	15) 3002 Supply	
7) 7220 ATC	16) 0180 Adjutant	
8) 7210 Air Def	17) 3404 Fin Mgmt	
9) 6602 Av Sup	18) 1302 Engineer	

BACK

East
West
Overseas (Accompanied)
Hawaii

I divorced and my son lives
in Raleigh N.C. with his mother.

** Contract 7599s, 7580s & 4401s will submit cards also (for purposes of assigning an MOS later on if the contract fall through for some reason [Medical, etc.])

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APPENDIX C: DATA MODEL ENTITIES

Entity Name	Description	Primary Key	Foreign Key	Marine	Light Duty	Phone	Phone Type	Email	Email Type	Staff Billet	Billet Lookup	Automobile	Prior Service	MOS	MOS Lookup	Physical	Chaper	Company Lookup	Swim Qual	Address	Dependent
AcademyGraduate	Academy Graduate: Yes or No																				
ActiveDuty	Is dependent on Active Duty			X																	
Address1	Home Address for Marine																				
Address2	Alternate Home Address for Marine																				
AddressID	Autonumber for Address Table	X																			
AddressType	Home, Barracks, etc																				
AssignDate	Assign Date																				
AssignRebual	Yes or No is rebual to comments allowed			X																	
AutonumlookuID	Autonumber for Ammunition Lookup	X	X																		
AssesID	Autonumber for Asses Table	X	X																		
AssesLookupID	Autonumber for Asses Lookup Table	X	X																		
AutocID	Autonumber for Automobile Table	X																			
Barracks	Name of Barracks			X																	
Billet	Billet name held by the Marine																				
BilletDescription	Description of Billet Assignment																				
BilletID	Autonumber for Billet Table	X																			
BilletID2	Autonumber for Billet Eval Table	X	X							X	X										
BloodType	Blood Type for the Marine			X																	
BodyFat	Body Fat Percentage															X					
City	Name of City for Address																				
ClassID	Autonumber for TBS Class (Empy)																				
Classification	Type of Rifle or Pistol Qual: E/M/S																				
ClassSize	Total number of personnel in TBS class																				
ClassSizeID	Autonumber for Class Size Table	X	X																		
CollateralDutyID	Description of assigned Collateral Duty																				
CollateralDutyID2	Autonumber for Collateral Duty Table	X	X																		
CollegeID	Autonumber for College Table	X																			
CollegeID2	Autonumber for Collage Table	X																			
CollegeName	Name of College(s) attended																				
Color	Color of Automobile																				
CommanderComment	Written comments from Commander																				
Comments	Additional Comments				X																
CommunicationSource	Communication Source (ROTC, PLC, etc)			X																	
CommunicationComment	Comment relative to Communication skills																				
CompanyFiscalYear	Fiscal Year of TBS Company																				
CompanyID	Autonumber for Company Lookup Table	X	X																		
CompanyID2	Autonumber for Company Table																				
CompanyID3	Autonumber for Company Table (A, B, C)																				
CompanyID4	Type of Command with the USMC			X																	
CompanyID5	Any further instructions for support																				
CoordinatingInstructions	Autonumber for Counseling Table entry	X																			
CounselingID	Type of Counseling being performed																				
CounselingType	Autonumber for type of counseling	X	X																		
CounselingTypeID	Autonumber for Address Table																				
Country	Country name for Address Table																				
Crunches	Number of crunches performed																				
CrunchesID	Autonumber for Crunches Table																				
Date	Date																				
DateOfBirth / DOB	Date of Birth																				
DateOfEntry	Date of Entry			X																	
Designation	Designation																				
Degree	College Degree (BA, BS, AA, etc)																				
DegreeDescription	Description of college degree received																				
DependentID	Autonumber for Dependents Table	X	X																		
DependentStatus	Dependent? Yes or No																				
Designator	Verbal description of MOS																				
DesignatorID	Designator number for SOIS Table																				
DODIC	DOD Identification Code																				
DODSticker	DOD Sticker Number																				
DODStickerID	Autonumber for DOD Sticker Table																				
DOR	Date of Rank																				
DORID	Autonumber for Duration Table																				
DORID2	Autonumber for Duration Table																				
DORID3	Autonumber for Duration Table																				
DORID4	Autonumber for Duration Table																				
DORID5	Autonumber for Duration Table																				
DORID6	Autonumber for Duration Table																				
DORID7	Autonumber for Duration Table																				
DORID8	Autonumber for Duration Table																				
DORID9	Autonumber for Duration Table																				
DORID10	Autonumber for Duration Table																				
DORID11	Autonumber for Duration Table																				
DORID12	Autonumber for Duration Table																				
DORID13	Autonumber for Duration Table																				
DORID14	Autonumber for Duration Table																				
DORID15	Autonumber for Duration Table																				
DORID16	Autonumber for Duration Table																				
DORID17	Autonumber for Duration Table																				
DORID18	Autonumber for Duration Table																				
DORID19	Autonumber for Duration Table																				
DORID20	Autonumber for Duration Table																				
DORID21	Autonumber for Duration Table																				
DORID22	Autonumber for Duration Table																				
DORID23	Autonumber for Duration Table																				
DORID24	Autonumber for Duration Table																				
DORID25	Autonumber for Duration Table																				
DORID26	Autonumber for Duration Table																				
DORID27	Autonumber for Duration Table																				
DORID28	Autonumber for Duration Table																				
DORID29	Autonumber for Duration Table																				
DORID30	Autonumber for Duration Table																				
DORID31	Autonumber for Duration Table																				
DORID32	Autonumber for Duration Table																				
DORID33	Autonumber for Duration Table																				
DORID34	Autonumber for Duration Table																				
DORID35	Autonumber for Duration Table																				
DORID36	Autonumber for Duration Table																				
DORID37	Autonumber for Duration Table																				
DORID38	Autonumber for Duration Table																				
DORID39	Autonumber for Duration Table																				
DORID40	Autonumber for Duration Table																				
DORID41	Autonumber for Duration Table																				
DORID42	Autonumber for Duration Table																				
DORID43	Autonumber for Duration Table																				
DORID44	Autonumber for Duration Table																				
DORID45	Autonumber for Duration Table																				
DORID46	Autonumber for Duration Table																				
DORID47	Autonumber for Duration Table																				
DORID48	Autonumber for Duration Table																				
DORID49	Autonumber for Duration Table																				
DORID50	Autonumber for Duration Table																				
DORID51	Autonumber for Duration Table																				
DORID52	Autonumber for Duration Table																				
DORID53	Autonumber for Duration Table																				
DORID54	Autonumber for Duration Table																				
DORID55	Autonumber for Duration Table																				

APPENDIX D: USER SURVEY AND STATISTICAL ANALYSIS

A. USER SURVEYS

1. To what group do you belong?
 - a. TBS Instructor or Permanent Staff (Warfighting, SPC, Headquarters Staff)
 - b. TBS Student
 - c. TBS Support Staff (CI Company, Armory, etc)
2. What is your gender?
 - a. Female
 - b. Male
3. What is your rank?
 - a. Enlisted (SGT and below)
 - b. SNCO
 - c. 2nd Lieutenant - 1st Lieutenant
 - d. Warrant Officer (WO-CWO5)
 - e. Captain
 - f. Major
 - g. Lt Colonel
4. Rate how much computer experience you have?
 - a. Computer Illiterate (I could turn on a computer if forced).
 - b. Semi-Literate (I can operate a computer for email and web-surfing).
 - c. Literate (email, web-surfing, word processing, etc).
 - d. Can't go through a day without a computer.
5. Rate your familiarity with databases?
 - a. Not a clue.
 - b. I know what they are but have no need or no experience with them.
 - c. Semi-Literate (I can operate products such as Microsoft Access for data storage and processing).
 - d. Literate (I can create, maintain, and manipulate data in a database).
6. How useful would you consider a TBS specific database be to you?
 - a. Not very useful.
 - b. Somewhat useful.
 - c. Very useful.
 - d. Unit could not function without one.
7. How useful would a common database in the hands of every graduating Lieutenant be in the fleet?
 - a. Not very useful.
 - b. Somewhat useful.

- c. Very useful.
 - d. I would rather learn what the unit is currently using and adapt to it rather than introduce new a system.
- 8. Rate how useful you would consider and addition to the POI for instruction in computer based office tools.
 - a. Not useful at all, we spend too much time in class as it is.
 - b. Somewhat useful, most of us could use to learn administrative functions.
 - c. Useful, it would be helpful to learn basic information and ways to use the systems provided (i.e. MS Word, MS Excel, Outlook).
 - d. Extremely useful, my functions as a Marine Officer will depend as much on my administrative ability as on my field training.
- 9. For reports and/or submissions to higher HHQ would you prefer:
 - a. The report format on-screen (it looks just like the final report)
 - b. A tabular form of the data for on-screen manipulation but the report prints in the correct format.
- 10. Given a user-friendly database, what is the most important functionality it must have?
 - a. The database needs to know what reports and what manipulation I will need to do based on my login profile and billet.
 - b. The database needs to track all of the information and then I will tell it what reports to produce.
 - c. The database can maintain a standard set of information and then I can add new fields and manipulate the data as the need arises.
- 11. As a graduating Lieutenant, would you be interested in a Windows based tool with a similar database to that one used by both the Headquarters section and the CI Company at TBS?
 - a. Interested.
 - b. Not interested.
 - c. Didn't or don't understand the question.
- 12. What is the most important criteria for a database (consider yourself an SPC or Platoon Sergeant responsible for tracking administrative data for 30 Marines)?
 - a. Ease of use (Given a user's manual and on-line help)
 - b. Ability to manipulate the data to produce reports
 - c. One stop shopping for all information tracking needs.
- 13. AS A STUDENT AT TBS, rate your interest in the ability to access a website containing your evaluations during the different phases of the POI to include, test scores, leadership evaluations, peer rankings, etc.
 - a. Very interested, I couldn't sleep without knowing these things.
 - b. Moderately interested, I would like to know if I am going to fail.
 - c. Not interested, the final certificate and a MOS are all that concern me.

14. AS A PART OF THE STAFF at TBS (all others besides students) rate your interest in the ability to access a website containing Officer-student (or Enlisted Marine) information which would allow you to track the progress of the Marine and manipulate the data to produce desired reports. Progress in this case could be seen as Rifle scores, Land Nav evaluations, MCI completion, etc.
- a. Very interested.
 - b. Moderately interested, I perform most of these functions by hand or with different database tools so an all encompassing tool would be nice.
 - c. Not interested.
15. In regards to producing a new product for TBS.
- a. What comments or suggestions could you provide?
 - b. What is most lacking at TBS relative to technology?

B. CHARTS CREATED BASED ON USERS RESPONSES

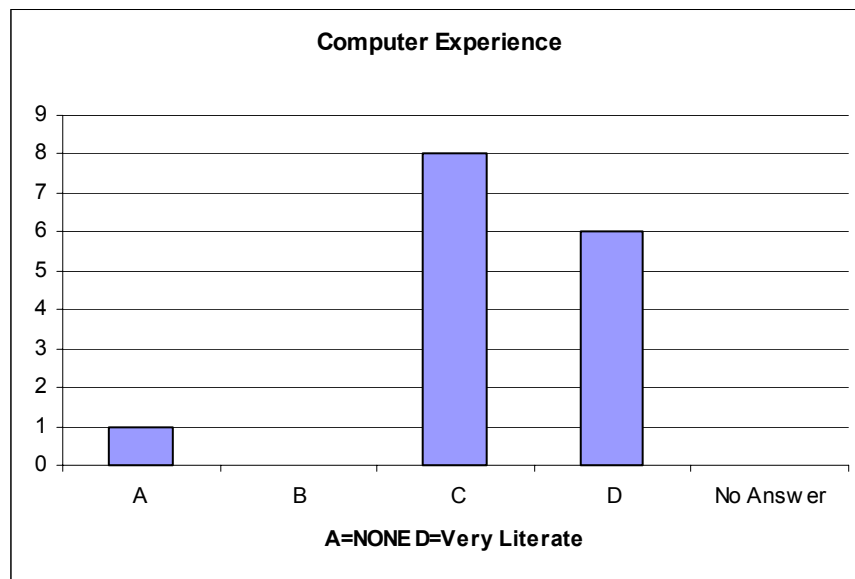


Chart B-1

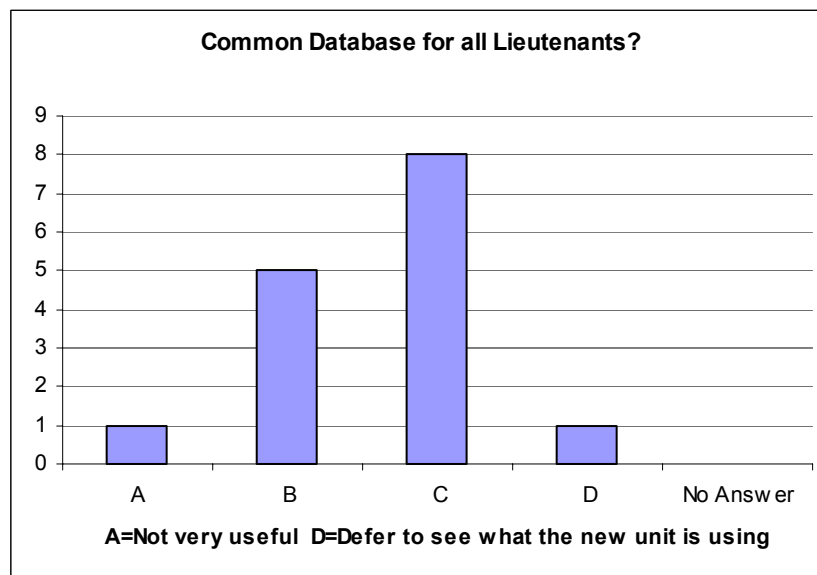


Chart B-2

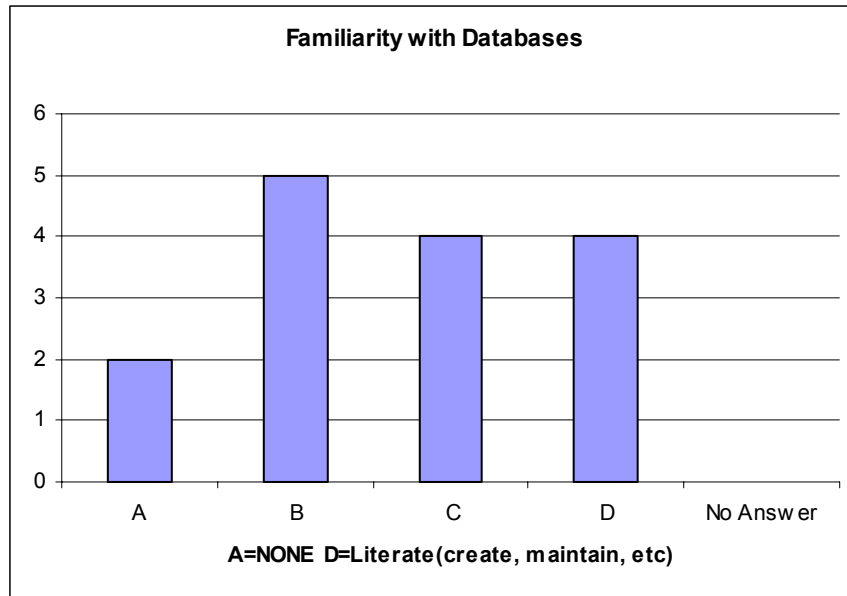


Chart B-3

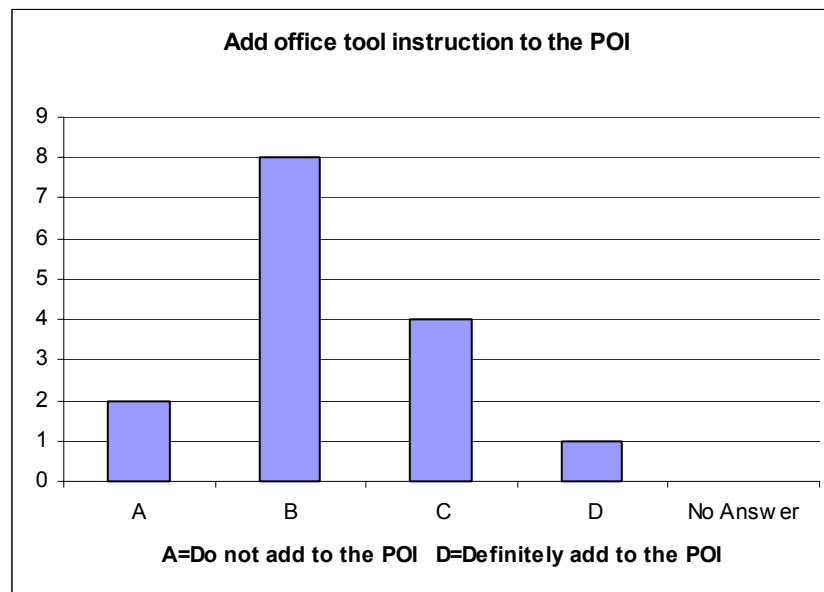


Chart B-4

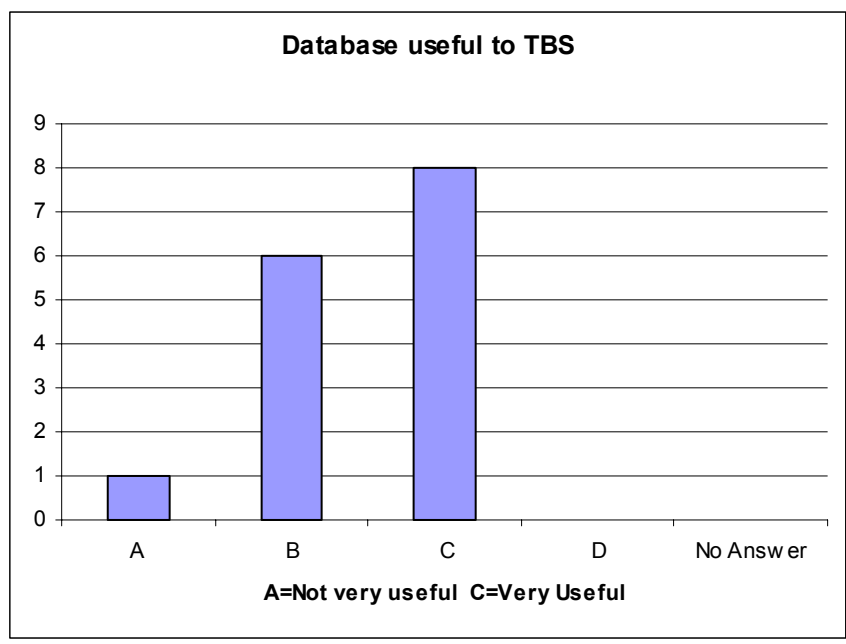


Chart B-5

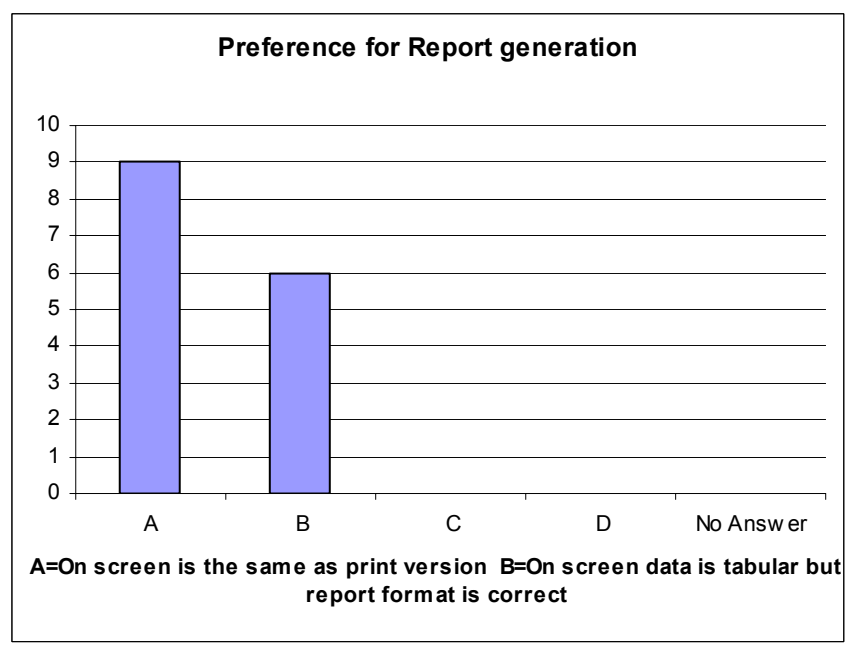


Chart B-6

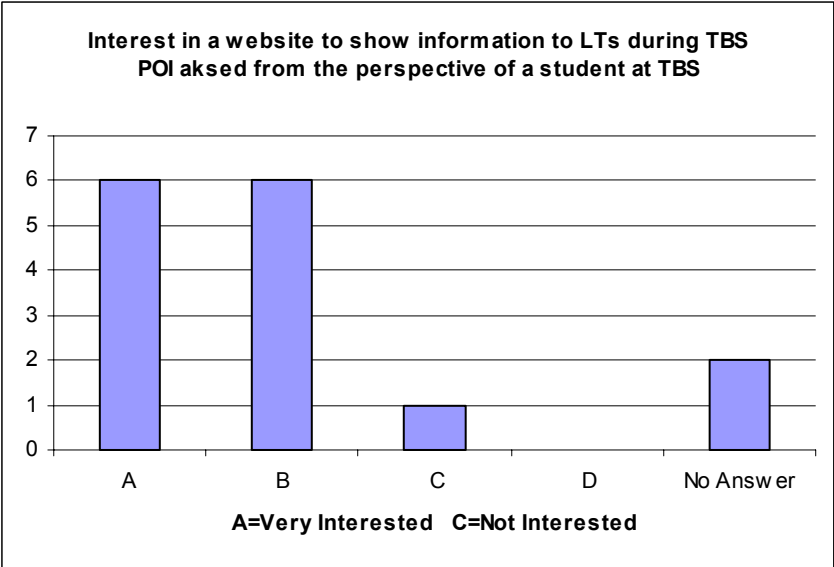


Chart B-7

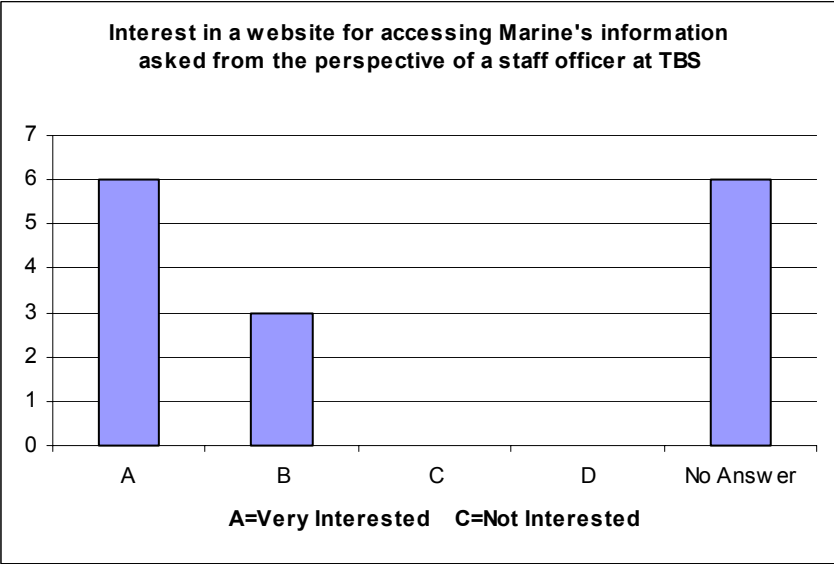


Chart B-8

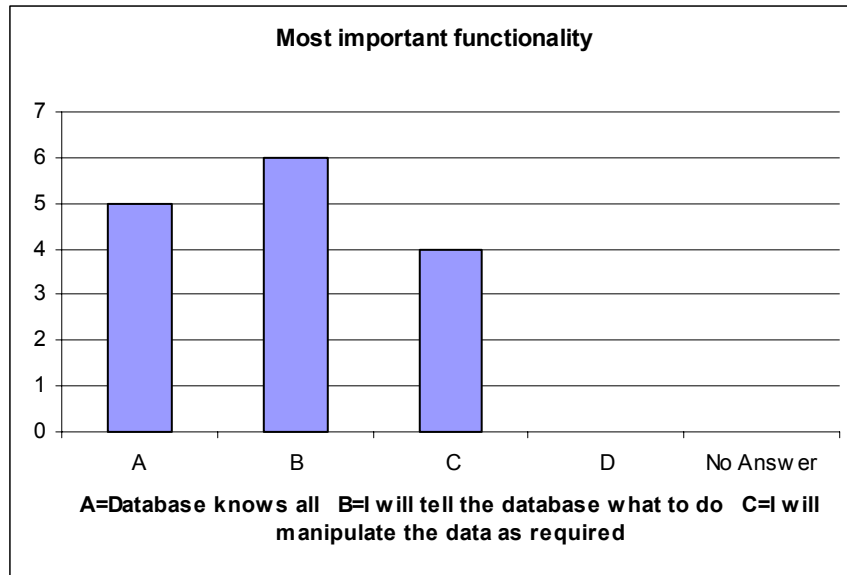


Chart B-9

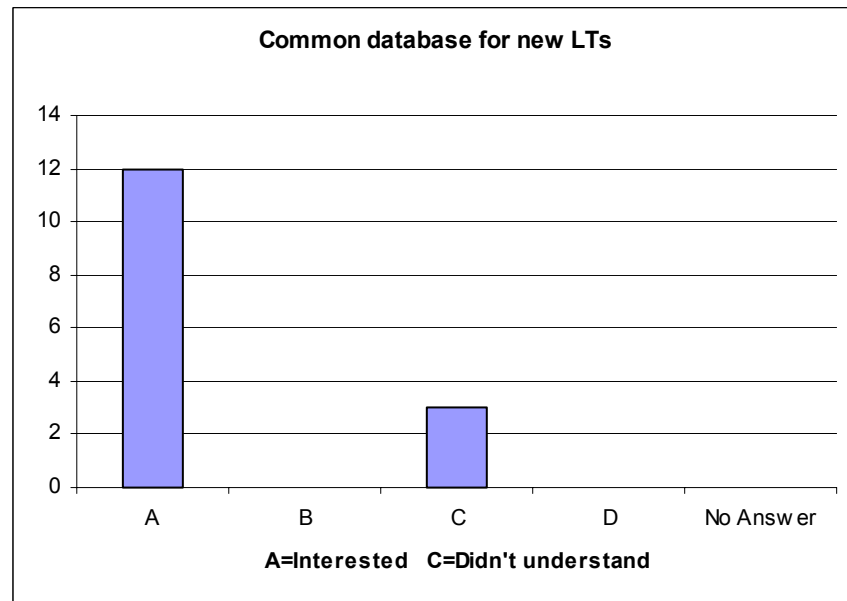


Chart B-10

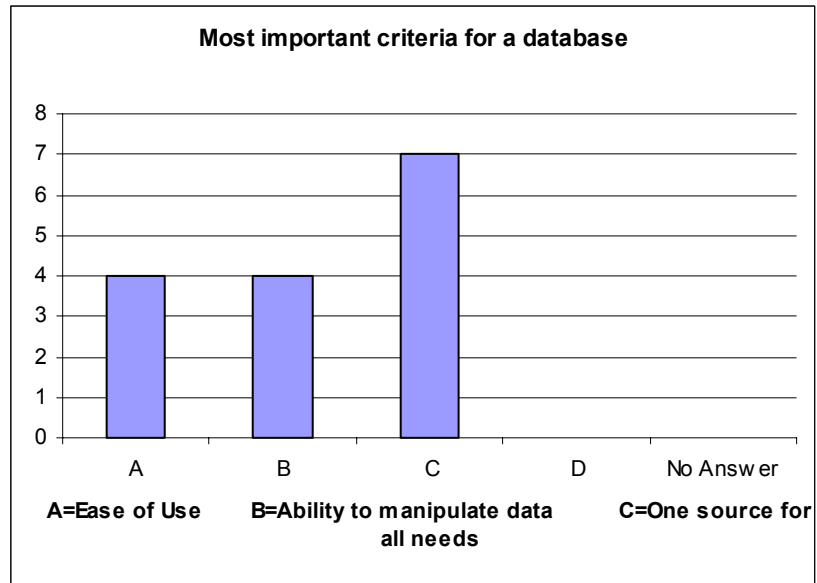


Chart B-1

	TBS Staff	TBS Student	TBS Support	Male	Female	E-1 to E-9	O-1 to O-2	O-3	O-4 to O-6	Ques 4	Ques 5	Ques 6	Ques 7	Ques 8	Ques 9	Ques 10	Ques 11	Ques 12	Ques 13	Ques 14
Respondent 1	X			X				X		D	C	C	D	C	A	B	C	C		B
Respondent 2	X			X				X		C	C	C	C	B	B	C	C		B	A
Respondent 3	X			X					X	A	A	A	A	A	A	A	A	A	A	A
Respondent 4	X			X				X		C	C	C	C	B	A	B	C		A	A
Respondent 5	X			X				X		D	D	C	C	D	A	A	A	A	A	A
Respondent 6		X		X			X			D	B	B	B	B	B	B	C	B		
Respondent 7		X		X			X	X		D	D	C	C	A	B	A	A	C	B	A
Respondent 8		X		X			X	X		C	B	C	C	B	A	C	C	B	A	B
Respondent 9		X		X			X	X		C	B	B	C	B	A	C	A	B	A	A
Respondent 10		X		X			X	X		C	B	B	B	B	A	C	C	A	A	
Respondent 11		X		X			X	X		C	A	B	B	C	B	A	C	A	A	
Respondent 12		X		X			X	X		D	D	C	C	B	A	B	A	B	B	
Respondent 13		X		X			X	X		C	C	C	C	C	A	A	A	C	B	
Respondent 14		X			X		X	X		D	D	B	B	C	B	B	A	C	B	
Respondent 15		X		X			X	X		C	B	B	B	B	B	B	A	B	C	B

Results
:

A	1	2	1	1	2	9	5	12	4	6	6
B	0	5	6	5	8	6	6	0	4	6	3
C	8	4	8	8	4	0	4	3	7	1	0
D	6	4	0	1	1	0	0	0	0	0	0
No Answer	0	0	0	0	0	0	0	0	0	2	6

APPENDIX E: DESIGN VIEW AND HTML CODE

A. BIR.asp, Basic Individual Record

1. DESIGN VIEW

The screenshot displays the 'Basic Information Record (MCU/BIR) - Dreamweaver UltraDev' design view. The interface includes a top navigation bar with 'Current User' fields for last and first names, a 'SWORD' logo, and a sidebar with various navigation links. The main content area is titled 'Basic Individual Record' and contains a form with the following fields:

Basic Individual Record			
Last Name	{Marine.LastName}	Contract	{Marine.Contract}
First Name	{Marine.FirstName}	College	{Marine.College}
Middle Initial	[]	Commissioning Source	{Marine.CommissionSour}
SSN	{Marine.SSN}	AFADB	{Marine.AFADB}
Nickname	{Marine.Nickname}	PEBD	{Marine.PEBD}
Rank	{Rank.Rank}	DOR	{Marine.DOR}
Gender	{Marine.Gender}	EAS	{Marine.EAS}
Race	{Marine.Race}		
Religion	{Marine.Religion}	Medical	
International	<input type="checkbox"/>	Blood Type	{Marine.BloodType}
Dependent Status	{Marine.DependentStatu}	Light Duty Records	Click Here
Date of Birth	{Marine.DateOf(Birth)}		
SWORD Information		Unit Information	
User Name	{Marine.UserName}	Company	[Dropdown]
Password	[Masked]	Platoon	[Dropdown]
Access Level	{Marine.AccessLevel}	Squad/Section	{Marine.SquadORSection}
		Fire Team	{Marine.FireTeam}

2. CODE

```
<%@LANGUAGE="VBSCRIPT"%>
<%
' *** Logout the current user.
MM_Logout = CStr(Request.ServerVariables("URL")) & "?MM_Logoutnow=1"
If (CStr(Request("MM_Logoutnow")) = "1") Then
    Session.Abandon
    MM_logoutRedirectPage = "default.htm"
    ' redirect with URL parameters (remove the "MM_Logoutnow" query param).
```

```

    if (MM_logoutRedirectPage = "") Then MM_logoutRedirectPage =
CStr(Request.ServerVariables("URL"))
    If (InStr(1, UC_redirectPage, "?", vbTextCompare) = 0 And Request.QueryString <>
"") Then
        MM_newQS = "?"
        For Each Item In Request.QueryString
            If (Item <> "MM_Logoutnow") Then
                If (Len(MM_newQS) > 1) Then MM_newQS = MM_newQS & "&"
                MM_newQS = MM_newQS & Item & "=" &
Server.URLEncode(Request.QueryString(Item))
            End If
        Next
        if (Len(MM_newQS) > 1) Then MM_logoutRedirectPage = MM_logoutRedirectPage
& MM_newQS
    End If
    Response.Redirect(MM_logoutRedirectPage)
End If
%>
<!--#include file="Connections/SWORDDatabase.asp" -->
<%
' *** Edit Operations: declare variables

MM_editAction = CStr(Request("URL"))
If (Request.QueryString <> "") Then
    MM_editAction = MM_editAction & "?" & Request.QueryString
End If

' boolean to abort record edit
MM_abortEdit = false

' query string to execute
MM_editQuery = ""
%>
<%
' *** Update Record: set variables

If (CStr(Request("MM_update")) <> "" And CStr(Request("MM_recordId")) <> "")
Then

    MM_editConnection = MM_SWORDDatabase_STRING
    MM_editTable = "Marine"
    MM_editColumn = "MarineID"
    MM_recordId = "" + Request.Form("MM_recordId") + ""
    MM_editRedirectUrl = "SWORDdefault.asp"
    MM_fieldsStr =
"txtLastName|value|txtContract|value|txtFirstName|value|txtCollege|value|txtMI|value|txt

```

```
CommSource|value|txtSSN|value|txtAFADB|value|txtNickname|value|txtPEBD|value|txt
DOR|value|txtGender|value|txtEAS|value|txtRace|value|txtReligion|value|chkInternational
|value|txtBloodType|value|txtDependentStatus|value|txtDOB|value|txtUserName|value|tx
tPassword|value|txtSquad|value|txtAccessLevel|value|txtFireTeam|value"
```

```
MM_columnsStr =
"LastName|',none,"|Contract|',none,"|FirstName|',none,"|College|',none,"|MI|',none,"|Com
missionSource|',none,"|SSN|',none,"|AFADB|'#,none,NULL|Nickname|',none,"|PEBD|'#,no
ne,NULL|DOR|'#,none,NULL|Gender|',none,"|EAS|'#,none,NULL|Race|',none,"|Religion|',
none,"|InternationalStudent|none,Yes,No|BloodType|',none,"|DependentStatus|',none,"|Da
teOfBirth|'#,none,NULL|UserName|',none,"|Password|',none,"|Squad|none,none,NULL|Ac
cessLevel|',none,"|FireTeam|none,none,NULL"
```

```
' create the MM_fields and MM_columns arrays
```

```
MM_fields = Split(MM_fieldsStr, "|")
```

```
MM_columns = Split(MM_columnsStr, "|")
```

```
' set the form values
```

```
For i = LBound(MM_fields) To UBound(MM_fields) Step 2
```

```
MM_fields(i+1) = CStr(Request.Form(MM_fields(i)))
```

```
Next
```

```
' append the query string to the redirect URL
```

```
If (MM_editRedirectUrl <> "" And Request.QueryString <> "") Then
```

```
If (InStr(1, MM_editRedirectUrl, "?", vbTextCompare) = 0 And Request.QueryString
<> "") Then
```

```
MM_editRedirectUrl = MM_editRedirectUrl & "?" & Request.QueryString
```

```
Else
```

```
MM_editRedirectUrl = MM_editRedirectUrl & "&" & Request.QueryString
```

```
End If
```

```
End If
```

```
End If
```

```
%>
```

```
<%
```

```
' *** Update Record: construct a sql update statement and execute it
```

```
If (CStr(Request("MM_update")) <> "" And CStr(Request("MM_recordId")) <> "")
```

```
Then
```

```
' create the sql update statement
```

```
MM_editQuery = "update " & MM_editTable & " set "
```

```
For i = LBound(MM_fields) To UBound(MM_fields) Step 2
```

```
FormVal = MM_fields(i+1)
```

```
MM_typeArray = Split(MM_columns(i+1), ",")
```

```
Delim = MM_typeArray(0)
```

```
If (Delim = "none") Then Delim = ""
```

```

AltVal = MM_typeArray(1)
If (AltVal = "none") Then AltVal = ""
EmptyVal = MM_typeArray(2)
If (EmptyVal = "none") Then EmptyVal = ""
If (FormVal = "") Then
    FormVal = EmptyVal
Else
    If (AltVal <> "") Then
        FormVal = AltVal
    ElseIf (Delim = "") Then ' escape quotes
        FormVal = "" & Replace(FormVal,"","'") & ""
    Else
        FormVal = Delim + FormVal + Delim
    End If
End If
If (i <> LBound(MM_fields)) Then
    MM_editQuery = MM_editQuery & ","
End If
MM_editQuery = MM_editQuery & MM_columns(i) & "=" & FormVal
Next
MM_editQuery = MM_editQuery & " where " & MM_editColumn & "=" &
MM_recordId

If (Not MM_abortEdit) Then
    ' execute the update
    Set MM_editCmd = Server.CreateObject("ADODB.Command")
    MM_editCmd.ActiveConnection = MM_editConnection
    MM_editCmd.CommandText = MM_editQuery
    MM_editCmd.Execute
    MM_editCmd.ActiveConnection.Close

    If (MM_editRedirectUrl <> "") Then
        Response.Redirect(MM_editRedirectUrl)
    End If
End If

End If
%>
<%
Dim UserName__MMColParam
UserName__MMColParam = "1"
if (Session("MM_Username") <> "") then UserName__MMColParam =
Session("MM_Username")
%>
<%
set UserName = Server.CreateObject("ADODB.Recordset")

```

```

UserName.ActiveConnection = MM_SWORDDatabase_STRING
UserName.Source = "SELECT MarineID, LastName, FirstName, MI, RankID, SSN,
UserName, Password FROM Marine WHERE UserName = " +
Replace(UserName__MMColParam, "", "") + ""
UserName.CursorType = 0
UserName.CursorLocation = 2
UserName.LockType = 3
UserName.Open()
UserName_numRows = 0
%>
<%
Dim Marine__MMColParam
Marine__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then Marine__MMColParam =
Request.QueryString("MarineID")
%>
<%
set Marine = Server.CreateObject("ADODB.Recordset")
Marine.ActiveConnection = MM_SWORDDatabase_STRING
Marine.Source = "SELECT * FROM QueryMarine WHERE MarineID = " +
Replace(Marine__MMColParam, "", "") + ""
Marine.CursorType = 0
Marine.CursorLocation = 2
Marine.LockType = 3
Marine.Open()
Marine_numRows = 0
%>
<%
Dim Rank__MMColParam
Rank__MMColParam = "1"
if (Request.QueryString("RankID") <> "") then Rank__MMColParam =
Request.QueryString("RankID")
%>
<%
set Rank = Server.CreateObject("ADODB.Recordset")
Rank.ActiveConnection = MM_SWORDDatabase_STRING
Rank.Source = "SELECT * FROM RankLookup WHERE RankID = " +
Replace(Rank__MMColParam, "", "") + ""
Rank.CursorType = 0
Rank.CursorLocation = 2
Rank.LockType = 3
Rank.Open()
Rank_numRows = 0
%>
<%
Dim CollateralDuty__MMColParam

```

```

CollateralDuty__MMColParam = "1"
if (Request.QueryString("CollateralDutyID") <> "") then CollateralDuty__MMColParam
= Request.QueryString("CollateralDutyID")
%>
<%
set CollateralDuty = Server.CreateObject("ADODB.Recordset")
CollateralDuty.ActiveConnection = MM_SWORDDatabase_STRING
CollateralDuty.Source = "SELECT * FROM CollateralDutyLookup WHERE
CollateralDutyID = " + Replace(CollateralDuty__MMColParam, "", "") + ""
CollateralDuty.CursorType = 0
CollateralDuty.CursorLocation = 2
CollateralDuty.LockType = 3
CollateralDuty.Open()
CollateralDuty_numRows = 0
%>
<%
Dim LightDuty__MMColParam
LightDuty__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then LightDuty__MMColParam =
Request.QueryString("MarineID")
%>
<%
set LightDuty = Server.CreateObject("ADODB.Recordset")
LightDuty.ActiveConnection = MM_SWORDDatabase_STRING
LightDuty.Source = "SELECT * FROM LightDuty WHERE MarineID = " +
Replace(LightDuty__MMColParam, "", "") + ""
LightDuty.CursorType = 0
LightDuty.CursorLocation = 2
LightDuty.LockType = 3
LightDuty.Open()
LightDuty_numRows = 0
%>
<%
set Company = Server.CreateObject("ADODB.Recordset")
Company.ActiveConnection = MM_SWORDDatabase_STRING
Company.Source = "SELECT CompanyID, CompanyName FROM CompanyLookup"
Company.CursorType = 0
Company.CursorLocation = 2
Company.LockType = 3
Company.Open()
Company_numRows = 0
%>
<%
set Platoon = Server.CreateObject("ADODB.Recordset")
Platoon.ActiveConnection = MM_SWORDDatabase_STRING
Platoon.Source = "SELECT * FROM PlatoonLookup"

```



```

Platoon.CursorType = 0
Platoon.CursorLocation = 2
Platoon.LockType = 3
Platoon.Open()
Platoon_numRows = 0
%>
<html>
<head>
<title>Basic Information Record</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<script language="JavaScript">
<!--
<!--
function MM_reloadPage(init) { //reloads the window if Nav4 resized
  if (init==true) with (navigator) {if
((appName=="Netscape")&&(parseInt(appVersion)==4)) {
    document.MM_pgW=innerWidth; document.MM_pgH=innerHeight;
onresize=MM_reloadPage; }}
  else if (innerWidth!=document.MM_pgW || innerHeight!=document.MM_pgH)
location.reload();
}
MM_reloadPage(true);
// -->

function MM_swapImgRestore() { //v3.0
  var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
  var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
  var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
  if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v4.0
  var p,i,x;  if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
  for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
  if(!x && document.getElementById) x=document.getElementById(n); return x;
}

function MM_swapImage() { //v3.0

```

```

var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
for(i=0;i<(a.length-2);i+=3)
  if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src;
x.src=a[i+2];}
}
//-->
</script>
</head>
<body bgcolor="#FFFFFF" text="#000000"
onLoad="MM_preloadImages('Images/mnuLocateOver.gif','Images/mnuLocateDown.gif',
'Images/mnuLogoutOver.gif','Images/mnuLogoutDown.gif','Images/mnuBIROver.gif','I
mages/mnuBIRDown.gif','Images/mnuRecallOver.gif','Images/mnuRecallDown.gif','Ima
ges/mnuEvalInfoOver.gif','Images/mnuEvaluationDown.gif','mnuClickOver.gif','mnuClic
kDown.gif','Images/mnuBTROver.gif','Images/mnuBTRDown.gif')">
<div id="Layer1" style="position:absolute; left:10px; top:60px; width:426px;
height:25px; z-index:1">
  <table width="433" border="0">
    <tr>
      <td><font color="#FF0000">Current User:
<%= (UserName.Fields.Item("LastName").Value)%>,
<%= (UserName.Fields.Item("FirstName").Value)%></font></td>
    </tr>
  </table>
</div>
<div id="Layer3" style="position:absolute; left:200px; top:145px; width:767px;
height:585px; z-index:3; visibility: visible; overflow: auto">
  <form name="EditBasic" method="POST" action="<%=MM_editAction%>">
    <table width="756" border="0">
      <tr>
        <td colspan="4">
          <div align="center"><font color="#0000FF"><b>Basic Individual
Record</b></font></div>
        </td>
      </tr>
      <tr>
        <td><font color="#0000FF">Last Name</font></td>
        <td width="239">
          <input type="text" name="txtLastName"
value="<%= (Marine.Fields.Item("LastName").Value)%>" size="30">
        </td>
        <td width="163"><font color="#0000FF">Contract</font></td>
        <td width="160">
          <input type="text" name="txtContract"
value="<%= (Marine.Fields.Item("Contract").Value)%>">
        </td>
      </tr>
    </table>
  </form>

```

```

<tr>
  <td><font color="#0000FF">First Name</font></td>
  <td width="239">
    <input type="text" name="txtFirstName"
value="<%= (Marine.Fields.Item("FirstName").Value)%>" size="30">
  </td>
  <td width="163"><font color="#0000FF">College</font></td>
  <td width="160">
    <input type="text" name="txtCollege"
value="<%= (Marine.Fields.Item("College").Value)%>" size="30">
  </td>
</tr>
<tr>
  <td><font color="#0000FF">Middle Initial</font></td>
  <td width="239">
    <input type="text" name="txtMI"
value="<%= (Marine.Fields.Item("MI").Value)%>" size="1">
  </td>
  <td width="163"><font color="#0000FF">Commissioning Source</font></td>
  <td width="160">
    <input type="text" name="txtCommSource"
value="<%= (Marine.Fields.Item("CommissionSource").Value)%>">
  </td>
</tr>
<tr>
  <td><font color="#0000FF">SSN</font></td>
  <td width="239">
    <input type="text" name="txtSSN"
value="<%= (Marine.Fields.Item("SSN").Value)%>" size="9">
  </td>
  <td width="163"><font color="#0000FF">AFADB</font></td>
  <td width="160">
    <input type="text" name="txtAFADB"
value="<%= (Marine.Fields.Item("AFADB").Value)%>">
  </td>
</tr>
<tr>
  <td><font color="#0000FF">Nickname</font></td>
  <td width="239">
    <input type="text" name="txtNickname"
value="<%= (Marine.Fields.Item("Nickname").Value)%>">
  </td>
  <td width="163"><font color="#0000FF">PEBD</font></td>
  <td width="160">
    <input type="text" name="txtPEBD"
value="<%= (Marine.Fields.Item("PEBD").Value)%>">

```

```

        </td>
    </tr>
    <tr>
        <td><font color="#0000FF">Rank</font></td>
        <td width="239">
            <input type="text" name="txtRank"
value="<%= (Rank.Fields.Item("Rank").Value)%>">
        </td>
        <td width="163"><font color="#0000FF">DOR</font></td>
        <td width="160">
            <input type="text" name="txtDOR"
value="<%= (Marine.Fields.Item("DOR").Value)%>">
        </td>
    </tr>
    <tr>
        <td><font color="#0000FF">Gender</font></td>
        <td width="239">
            <input type="text" name="txtGender"
value="<%= (Marine.Fields.Item("Gender").Value)%>">
        </td>
        <td width="163"><font color="#0000FF">EAS</font></td>
        <td width="160">
            <input type="text" name="txtEAS"
value="<%= (Marine.Fields.Item("EAS").Value)%>">
        </td>
    </tr>
    <tr>
        <td><font color="#0000FF">Race</font></td>
        <td width="239">
            <input type="text" name="txtRace"
value="<%= (Marine.Fields.Item("Race").Value)%>">
        </td>
        <td width="163">&nbsp;</td>
        <td width="160">&nbsp;</td>
    </tr>
    <tr>
        <td height="20"><font color="#0000FF">Religion</font></td>
        <td width="239" height="20">
            <input type="text" name="txtReligion"
value="<%= (Marine.Fields.Item("Religion").Value)%>">
        </td>
        <td><font color="#0000FF"><b>Medical</b></font></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td><font color="#0000FF">International</font></td>

```

```

        <td width="239">
            <input type="checkbox" name="chkInternational"
value="<%= (Marine.Fields.Item("InternationalStudent").Value)%>">
        </td>
        <td width="163"><font color="#0000FF">Blood Type</font></td>
        <td width="160">
            <input type="text" name="txtBloodType"
value="<%= (Marine.Fields.Item("BloodType").Value)%>">
        </td>
    </tr>
    <tr>
        <td><font color="#0000FF">Dependent Status</font></td>
        <td width="239">
            <input type="text" name="txtDependentStatus"
value="<%= (Marine.Fields.Item("DependentStatus").Value)%>">
        </td>
        <td width="163"><font color="#0000FF">Light Duty Records</font></td>
        <td width="160"><a
href="BIRMedical.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image5','mnuClickOver.gif',1)"
onClick="MM_swapImage('Image5','mnuClickDown.gif',1)"></a></td>
    </tr>
    <tr>
        <td><font color="#0000FF">Date of Birth</font></td>
        <td width="239">
            <input type="text" name="txtDOB"
value="<%= (Marine.Fields.Item("DateOfBirth").Value)%>">
        </td>
        <td width="163">&nbsp;</td>
        <td width="160">&nbsp;</td>
    </tr>
    <tr>
        <td>&nbsp;</td>
        <td width="239">&nbsp;</td>
        <td width="163"><font color="#0000FF"><b>Unit Information</b></font></td>
        <td width="160">&nbsp;</td>
    </tr>
    <tr>
        <td colspan="2"><font color="#0000FF"><b>SWORD
Information</b></font></td>
        <td><font color="#0000FF">Company</font></td>
        <td width="239">
            <select name="select">
                <%

```

```

While (NOT Company.EOF)
%>
    <option value="<%= (Company.Fields.Item("CompanyID").Value)%>" <%if
(CStr(Company.Fields.Item("CompanyID").Value) =
CStr(Marine.Fields.Item("CompanyID").Value)) then Response.Write("SELECTED") :
Response.Write("")%>
><%= (Company.Fields.Item("CompanyName").Value)%></option>
    <%
    Company.MoveNext()
Wend
If (Company.CursorType > 0) Then
    Company.MoveFirst
Else
    Company.Requery
End If
%>
    </select>
</td>
</tr>
<tr>
    <td><font color="#0000FF">User Name</font></td>
    <td width="239">
        <input type="text" name="txtUserName"
value="<%= (Marine.Fields.Item("UserName").Value)%>">
    </td>
    <td><font color="#0000FF">Platoon</font></td>
    <td width="239">
        <select name="selPlatoon">
            <%
While (NOT Platoon.EOF)
%>
    <option value="<%= (Platoon.Fields.Item("PlatoonID").Value)%>" <%if
(CStr(Platoon.Fields.Item("PlatoonID").Value) =
CStr(Marine.Fields.Item("PlatoonID").Value)) then Response.Write("SELECTED") :
Response.Write("")%> ><%= (Platoon.Fields.Item("Platoon").Value)%></option>
            <%
            Platoon.MoveNext()
Wend
If (Platoon.CursorType > 0) Then
            Platoon.MoveFirst
Else
            Platoon.Requery
End If
%>
        </select>
        </td>

```

```

</tr>
<tr>
  <td><font color="#0000FF">Password</font></td>
  <td width="239">
    <input type="password" name="txtPassword"
value="<%= (Marine.Fields.Item("Password").Value) %>">
  </td>
  <td><font color="#0000FF">Squad/Section</font></td>
  <td width="239">
    <input type="text" name="txtSquad"
value="<%= (Marine.Fields.Item("SquadORSection").Value) %>">
  </td>
</tr>
<tr>
  <td><font color="#0000FF">Access Level</font></td>
  <td width="239">
    <input type="text" name="txtAccessLevel"
value="<%= (Marine.Fields.Item("AccessLevel").Value) %>">
  </td>
  <td><font color="#0000FF">Fire Team</font></td>
  <td width="239">
    <input type="text" name="txtFireTeam"
value="<%= (Marine.Fields.Item("FireTeam").Value) %>">
  </td>
</tr>
<tr>
  <td>&nbsp;</td>
  <td width="239">&nbsp;</td>
  <td>&nbsp;</td>
  <td width="239">&nbsp;</td>
</tr>
<tr>
  <td>&nbsp;</td>
  <td width="239">&nbsp;</td>
  <td width="163">&nbsp;</td>
  <td width="160">&nbsp;</td>
</tr>
</table>
<div align="center">
  <input type="submit" name="Submit" value="Update Record">
</div>
<input type="hidden" name="MM_update" value="true">
<input type="hidden" name="MM_recordId" value="<%=
Marine.Fields.Item("MarineID").Value %>">
</form>
</div>

```

```


<table width="126" border="0" cellpadding="0" cellspacing="0" mm:layoutgroup="true"
height="591">
  <tr>
    <td valign="top" height="505" width="126">
      <table width="180" border="0" bgcolor="#CCCCCC">
        <tr>
          <td height="24" width="154"></td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"></div>
          </td>
        </tr>
        <tr>
          <td height="24" width="154">
            <p align="right"></p>
          </td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"></div>
          </td>
        </tr>
        <tr>
          <td height="24" width="154"></td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"><a href="SelectCompany.asp"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image1','Images/mnuLocateOver.gif',1)"
onClick="MM_swapImage('Image1','Images/mnuLocateDown.gif',1)"></a></div>
          </td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"><a
href="BIR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"

```



```

onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('NewBIR1','Images/mnuBIROver.gif',1)"
onClick="MM_swapImage('NewBIR1','Images/mnuBIRDown.gif',1)"></a></div>
</td>
</tr>
<tr>
<td height="24" width="154">
<p align="right"><a
href="BTR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image6','Images/mnuBTROver.gif',1)"
onClick="MM_swapImage('Image6','Images/mnuBTRDown.gif',1)"></a></p>
</td>
</tr>
<tr>
<td height="24" width="154">
<div align="right"><a
href="Recall.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Recall','Images/mnuRecallOver.gif',1)"
onClick="MM_swapImage('Recall','Images/mnuRecallDown.gif',1)"></a></div>
</td>
</tr>
<tr>
<td height="24" width="154">
<div align="right"><a
href="EvalMenu.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>&Com
panyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image4','Images/mnuEvalInfoOver.gif',1)"
onClick="MM_swapImage('Image4','Images/mnuEvaluationDown.gif',1)"></a></div>
</td>
</tr>
<tr>
<td width="154">
<div align="right"></div>
</td>

```

```

        </tr>
        <tr>
            <td width="154"></td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154"></td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>

```

```

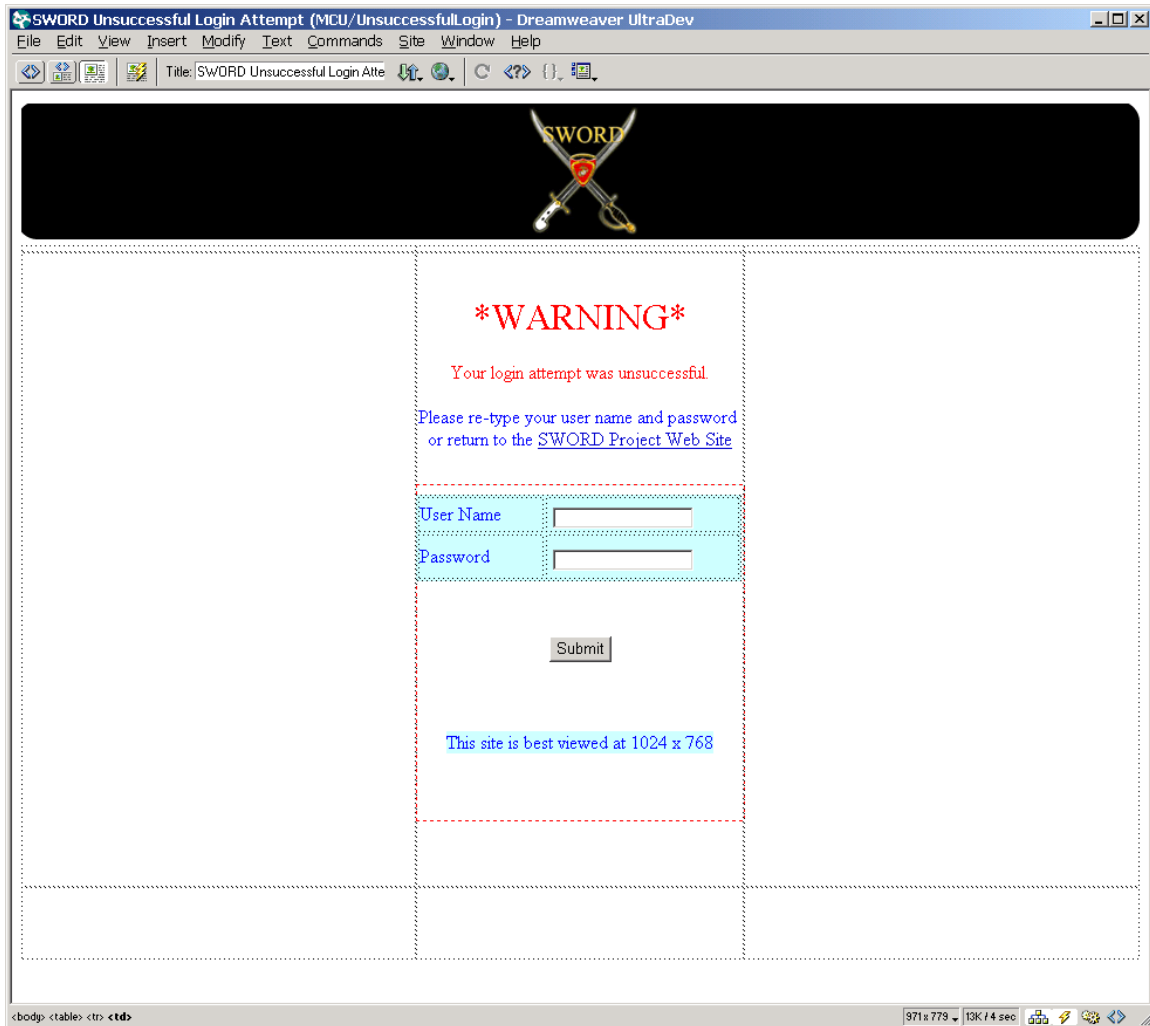
        <td width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td width="154"></td>
    </tr>
    <tr>
        <td width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td width="154"><a href="<%=MM_Logout%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Logout','Images/mnuLogoutOver.gif',1)"
onClick="MM_swapImage('Logout','Images/mnuLogoutDown.gif',1)"></a></td>
    </tr>
</table>
</td>
</tr>
</table>
</body>
</html>
<%
UserName.Close()
%>
<%
Marine.Close()
%>
<%
Rank.Close()
%>
<%
CollateralDuty.Close()

```

```
%>
<%
LightDuty.Close()
%>
<%
Company.Close()
%>
<%
Platoon.Close()
%
```

B. UnsuccessfulLogin.asp, SWORD Unsuccessful Login Attempt

1. DESIGN VIEW



2. CODE

```
<%@LANGUAGE="VBSCRIPT"%>
<!--#include file="Connections/SWORDDatabase.asp" -->
<%
set Marine = Server.CreateObject("ADODB.Recordset")
Marine.ActiveConnection = MM_SWORDDatabase_STRING
Marine.Source = "SELECT MarineID, UserName, Password FROM Marine"
Marine.CursorType = 0
Marine.CursorLocation = 2
Marine.LockType = 3
Marine.Open()
Marine_numRows = 0
```

```

%>
<%
' *** Validate request to log in to this site.
MM_LoginAction = Request.ServerVariables("URL")
If Request.QueryString<>"" Then MM_LoginAction = MM_LoginAction + "?" +
Request.QueryString
MM_valUsername=CStr(Request.Form("UserName"))
If MM_valUsername <> "" Then
    MM_fldUserAuthorization=""
    MM_redirectLoginSuccess="SWORDdefault.asp"
    MM_redirectLoginFailed="default.htm"
    MM_flag="ADODB.Recordset"
    set MM_rsUser = Server.CreateObject(MM_flag)
    MM_rsUser.ActiveConnection = MM_SWORDDatabase_STRING
    MM_rsUser.Source = "SELECT UserName, Password"
    If MM_fldUserAuthorization <> "" Then MM_rsUser.Source = MM_rsUser.Source &
    "," & MM_fldUserAuthorization
    MM_rsUser.Source = MM_rsUser.Source & " FROM Marine WHERE UserName='" &
MM_valUsername &'" AND Password='" & CStr(Request.Form("Password")) & "'"
    MM_rsUser.CursorType = 0
    MM_rsUser.CursorLocation = 2
    MM_rsUser.LockType = 3
    MM_rsUser.Open
    If Not MM_rsUser.EOF Or Not MM_rsUser.BOF Then
        ' username and password match - this is a valid user
        Session("MM_Username") = MM_valUsername
        If (MM_fldUserAuthorization <> "") Then
            Session("MM_UserAuthorization") =
CStr(MM_rsUser.Fields.Item(MM_fldUserAuthorization).Value)
        Else
            Session("MM_UserAuthorization") = ""
        End If
        if CStr(Request.QueryString("accessdenied")) <> "" And false Then
            MM_redirectLoginSuccess = Request.QueryString("accessdenied")
        End If
        MM_rsUser.Close
        Response.Redirect(MM_redirectLoginSuccess)
    End If
    MM_rsUser.Close
    Response.Redirect(MM_redirectLoginFailed)
End If
%>
<html>
<head>
<title>SWORD Unsuccessful Login Attempt</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">

```

```

<script language="JavaScript">
<!--
function MM_findObj(n, d) { //v4.0
  var p,i,x; if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
  for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
  if(!x && document.getElementById) x=document.getElementById(n); return x;
}

function MM_validateForm() { //v4.0
  var i,p,q,nm,test,num,min,max,errors="",args=MM_validateForm.arguments;
  for (i=0; i<(args.length-2); i+=3) { test=args[i+2]; val=MM_findObj(args[i]);
    if (val) { nm=val.name; if ((val=val.value)!="") {
      if (test.indexOf('isEmail')!=-1) { p=val.indexOf('@');
        if (p<1 || p==(val.length-1)) errors+="- "+nm+" must contain an e-mail address.\n";
      } else if (test!='R') {
        if (isNaN(val)) errors+="- "+nm+" must contain a number.\n";
        if (test.indexOf('inRange') != -1) { p=test.indexOf(':');
          min=test.substring(8,p); max=test.substring(p+1);
          if (val<min || max<val) errors+="- "+nm+" must contain a number between '+min+'
and '+max+'.\n";
        } } } else if (test.charAt(0) == 'R') errors += '- '+nm+' is required.\n'; }
    } if (errors) alert("The following error(s) occurred:\n"+errors);
    document.MM_returnValue = (errors == "");
  }
}
//-->
</script>
</head>
<body bgcolor="#FFFFFF" text="#000000">

<table width="955" border="0" cellpadding="0" cellspacing="0">
  <tr>
    <td width="337" height="6"></td>
    <td width="280"></td>
    <td width="338"></td>
  </tr>
  <tr>
    <td height="346"> </td>
    <td valign="top">
      <p>&nbsp;</p>
      <p align="center"><font color="#FF0000" size="+3">*WARNING*</font></p>
      <p align="center"><font color="#FF0000">Your login attempt was
unsuccessful.</font></p>
      <p align="center"><font color="#0000FF">Please re-type your user name and

```

```

        password or return to the <a href="default.htm">SWORD Project Web
Site</a></font></p>
        <form name="LogIn" action="<%=MM_LoginAction%>" method="post">
        <table width="278" border="0">
        <tr align="center" valign="middle">
        <td width="103">
        <div align="left"><font color="#0000FF">User Name</font></div>
        </td>
        <td width="159">
        <div align="left">
        <input type="text" name="UserName">
        </div>
        </td>
        </tr>
        <tr align="center" valign="middle">
        <td width="103" height="38">
        <div align="left"><font color="#0000FF">Password</font></div>
        </td>
        <td width="159" height="38">
        <div align="left">
        <input type="password" name="Password" value="">
        </div>
        </td>
        </tr>
        </table>
        <div align="center">
        <p>&nbsp;</p>
        <p>
        <input type="submit" name="Submit" value="Submit"
onClick="MM_validateForm('UserName','R','Password','R');return
document.MM_returnValue">
        </p>
        <p>&nbsp;</p>
        <p><font color="#0000FF">This site is best viewed at 1024 x 768</font></p>
        <p>&nbsp;</p>
        </div>
        </form>
        <p>&nbsp;</p>
        <p align="center">&nbsp;</p>
        </td>
        <td></td>
        </tr>
        <tr>
        <td height="62"></td>
        <td></td>
        <td></td>

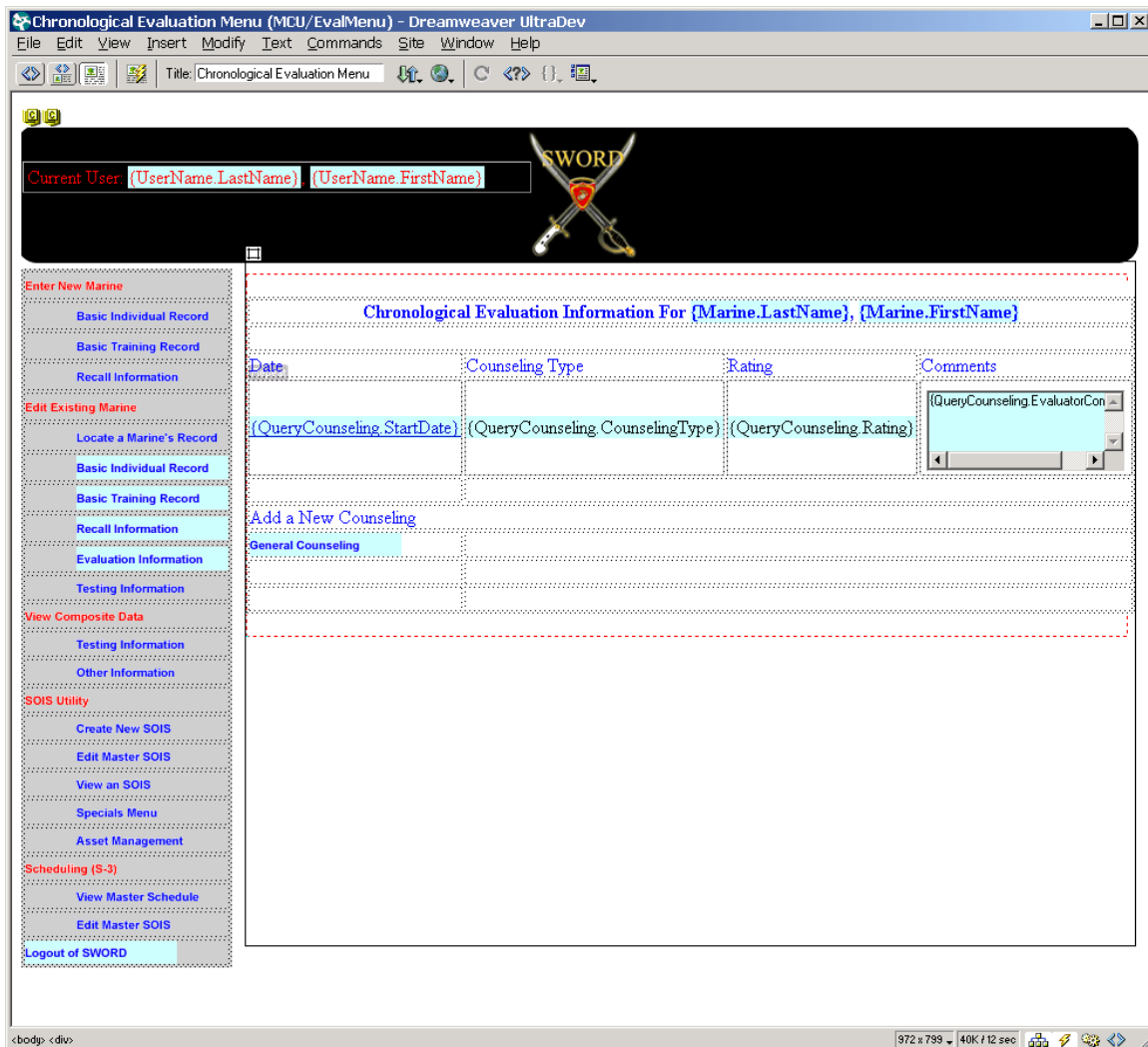
```



```
</tr>
</table>
</body>
</html>
<%
Marine.Close()
%>
```

C. EvalMenu.asp, Chronological Evaluation Menu

1. DESIGN VIEW



2. CODE

```
<%@LANGUAGE="VBSCRIPT"%>
<%
' *** Logout the current user.
MM_Logout = CStr(Request.ServerVariables("URL")) & "?MM_Logoutnow=1"
If (CStr(Request("MM_Logoutnow")) = "1") Then
    Session.Abandon
    MM_logoutRedirectPage = "default.htm"
    ' redirect with URL parameters (remove the "MM_Logoutnow" query param).
    if (MM_logoutRedirectPage = "") Then MM_logoutRedirectPage =
CStr(Request.ServerVariables("URL"))
```

```

If (InStr(1, UC_redirectPage, "?", vbTextCompare) = 0 And Request.QueryString <>
""") Then
    MM_newQS = "?"
    For Each Item In Request.QueryString
        If (Item <> "MM_Logoutnow") Then
            If (Len(MM_newQS) > 1) Then MM_newQS = MM_newQS & "&"
            MM_newQS = MM_newQS & Item & "=" &
Server.URLEncode(Request.QueryString(Item))
        End If
    Next
    if (Len(MM_newQS) > 1) Then MM_logoutRedirectPage = MM_logoutRedirectPage
& MM_newQS
    End If
    Response.Redirect(MM_logoutRedirectPage)
End If
%>
<!--#include file="Connections/SWORDDatabase.asp" -->
<%
Dim UserName__MMColParam
UserName__MMColParam = "1"
if (Session("MM_Username") <> "") then UserName__MMColParam =
Session("MM_Username")
%>
<%
set UserName = Server.CreateObject("ADODB.Recordset")
UserName.ActiveConnection = MM_SWORDDatabase_STRING
UserName.Source = "SELECT MarineID, LastName, FirstName, MI, RankID, SSN,
UserName, Password FROM Marine WHERE UserName = " +
Replace(UserName__MMColParam, "'", "''") + "'"
UserName.CursorType = 0
UserName.CursorLocation = 2
UserName.LockType = 3
UserName.Open()
UserName_numRows = 0
%>
<%
Dim Marine__MMColParam
Marine__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then Marine__MMColParam =
Request.QueryString("MarineID")
%>
<%
set Marine = Server.CreateObject("ADODB.Recordset")
Marine.ActiveConnection = MM_SWORDDatabase_STRING
Marine.Source = "SELECT * FROM Marine WHERE MarineID = " +
Replace(Marine__MMColParam, "'", "''") + "'"

```

```

Marine.CursorType = 0
Marine.CursorLocation = 2
Marine.LockType = 3
Marine.Open()
Marine_numRows = 0
%>
<%
Dim Company__MMColParam
Company__MMColParam = "1"
if (Request.QueryString("CompanyID") <> "") then Company__MMColParam =
Request.QueryString("CompanyID")
%>
<%
set Company = Server.CreateObject("ADODB.Recordset")
Company.ActiveConnection = MM_SWORDDatabase_STRING
Company.Source = "SELECT CompanyID, CompanyName FROM CompanyLookup
WHERE CompanyID = " + Replace(Company__MMColParam, "'", "''") + ""
Company.CursorType = 0
Company.CursorLocation = 2
Company.LockType = 3
Company.Open()
Company_numRows = 0
%>
<%
Dim CounselingType__MMColParam
CounselingType__MMColParam = "1"
if (Request.QueryString("CounselingTypeID") <> "") then
CounselingType__MMColParam = Request.QueryString("CounselingTypeID")
%>
<%
set CounselingType = Server.CreateObject("ADODB.Recordset")
CounselingType.ActiveConnection = MM_SWORDDatabase_STRING
CounselingType.Source = "SELECT * FROM CounselingType WHERE
CounselingTypeID = " + Replace(CounselingType__MMColParam, "'", "''") + ""
CounselingType.CursorType = 0
CounselingType.CursorLocation = 2
CounselingType.LockType = 3
CounselingType.Open()
CounselingType_numRows = 0
%>
<%
Dim Billet__MMColParam
Billet__MMColParam = "1"
if (Request.Form("BilletID") <> "") then Billet__MMColParam =
Request.Form("BilletID")
%>

```

```

<%
set Billet = Server.CreateObject("ADODB.Recordset")
Billet.ActiveConnection = MM_SWORDDatabase_STRING
Billet.Source = "SELECT * FROM BilletLookup WHERE BilletID = " +
Replace(Billet__MMColParam, "", "") + ""
Billet.CursorType = 0
Billet.CursorLocation = 2
Billet.LockType = 3
Billet.Open()
Billet_numRows = 0
%>
<%
Dim Counseling__MMColParam
Counseling__MMColParam = "2"
if (Request.QueryString("MarineID") <> "") then Counseling__MMColParam =
Request.QueryString("MarineID")
%>
<%
Dim Counseling__varCounselingTypeID
Counseling__varCounselingTypeID = "7"
if (Request.QueryString("CounselingTypeID") <> "") then
Counseling__varCounselingTypeID = Request.QueryString("CounselingTypeID")
%>
<%
set Counseling = Server.CreateObject("ADODB.Recordset")
Counseling.ActiveConnection = MM_SWORDDatabase_STRING
Counseling.Source = "SELECT * FROM Counseling WHERE MarineID = " +
Replace(Counseling__MMColParam, "", "") + " AND CounselingTypeID = " +
Replace(Counseling__varCounselingTypeID, "", "") + " ORDER BY StartDate ASC"
Counseling.CursorType = 0
Counseling.CursorLocation = 2
Counseling.LockType = 3
Counseling.Open()
Counseling_numRows = 0
%>
<%
Dim QueryCounseling__MMColParam
QueryCounseling__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then QueryCounseling__MMColParam =
Request.QueryString("MarineID")
%>
<%
set QueryCounseling = Server.CreateObject("ADODB.Recordset")
QueryCounseling.ActiveConnection = MM_SWORDDatabase_STRING
QueryCounseling.Source = "SELECT * FROM QueryCounseling WHERE MarineID =
" + Replace(QueryCounseling__MMColParam, "", "") + " ORDER BY StartDate ASC"

```

```

QueryCounseling.CursorType = 0
QueryCounseling.CursorLocation = 2
QueryCounseling.LockType = 3
QueryCounseling.Open()
QueryCounseling_numRows = 0
%>
<%
Dim Repeat1__numRows
Repeat1__numRows = -1
Dim Repeat1__index
Repeat1__index = 0
QueryCounseling_numRows = QueryCounseling_numRows + Repeat1__numRows
%>
<html>
<head>
<title>Chronological Evaluation Menu</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<script language="JavaScript">
<!--
<!--
function MM_reloadPage(init) { //reloads the window if Nav4 resized
  if (init==true) with (navigator) {if
((appName=="Netscape")&&(parseInt(appVersion)==4)) {
    document.MM_pgW=innerWidth; document.MM_pgH=innerHeight;
onresize=MM_reloadPage; }}
  else if (innerWidth!=document.MM_pgW || innerHeight!=document.MM_pgH)
location.reload();
}
MM_reloadPage(true);
// -->

function MM_swapImgRestore() { //v3.0
  var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
  var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
  var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
  if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v4.0
  var p,i,x;  if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];

```

```

    for(i=0;!x&& d.layers&& i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
    if(!x && document.getElementById) x=document.getElementById(n); return x;
}

function MM_swapImage() { //v3.0
    var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
    for(i=0;i<(a.length-2);i+=3)
        if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src;
x.src=a[i+2];}
    }
//-->
</script>
</head>
<body bgcolor="#FFFFFF" text="#000000"
onLoad="MM_preloadImages('Images/mnuLocateOver.gif','Images/mnuLocateDown.gif'
,'Images/mnuLogoutOver.gif','Images/mnuLogoutDown.gif','Images/mnuBIROver.gif','I
mages/mnuBIRDown.gif','Images/mnuRecallOver.gif','Images/mnuRecallDown.gif','I
mages/mnuEvalInfoOver.gif','Images/mnuEvaluationDown.gif','Images/mnuBTROver.gif','I
mages/mnuBTRDown.gif','Images/mnuGeneralCounselingOver.gif','Images/mnuGeneral
CounselingDown.gif')">
<div id="Layer1" style="position:absolute; left:10px; top:60px; width:426px;
height:25px; z-index:1">
    <table width="433" border="0">
        <tr>
            <td><font color="#FF0000">Current User:
<%= (UserName.Fields.Item("LastName").Value)%>,
<%= (UserName.Fields.Item("FirstName").Value)%></font></td>
        </tr>
    </table>
</div>
<div id="Layer3" style="position:absolute; left:200px; top:145px; width:753px;
height:585px; z-index:3; visibility: visible">
    <form name="EditBasic">
        <table width="756" border="0">
            <tr>
                <td colspan="4">
                    <div align="center"><font color="#0000FF"><b>Chronological Evaluation
Information For <%= (Marine.Fields.Item("LastName").Value)%>,
<%= (Marine.Fields.Item("FirstName").Value)%></b></font></div>
                </td>
            </tr>
            <tr>
                <td colspan="4">&nbsp;   </td>
            </tr>
        </table>
    </form>

```

```

        <td width="100"><font color="#0000FF">Date</font></td>
        <td width="222"><font color="#0000FF">Counseling Type</font></td>
        <td width="120"><font color="#0000FF">Rating</font></td>
        <td width="174"><font color="#0000FF">Comments</font></td>
    </tr>
    <%
While ((Repeat1__numRows <> 0) AND (NOT QueryCounseling.EOF))
%>
        <tr>
            <td width="100">
                <p><a href="<%= (QueryCounseling.Fields.Item("StartDate").Value)%>"></a><a href="SelectReport.asp?MarineID=<%= (QueryCounseling.Fields.Item("MarineID").Value)%>&CounselingID=<%= (QueryCounseling.Fields.Item("CounselingID").Value)%>"><%= (QueryCounseling.Fields.Item("StartDate").Value)%></a></p>
            </td>
            <td width="222"><%= (QueryCounseling.Fields.Item("CounselingType").Value)%></td>
            <td width="120"><%= (QueryCounseling.Fields.Item("Rating").Value)%></td>
            <td width="174">
                <textarea name="textfield" cols="30"
rows="3"><%= (QueryCounseling.Fields.Item("EvaluatorComment").Value)%></textare
a>
            </td>
        </tr>
    <%
Repeat1__index=Repeat1__index+1
Repeat1__numRows=Repeat1__numRows-1
QueryCounseling.MoveNext()
Wend
%>
        <tr>
            <td width="100">&nbsp;</td>
            <td colspan="3">&nbsp;</td>
        </tr>
        <tr>
            <td colspan="4"><font color="#0000FF">Add a New Counseling</font></td>
        </tr>
        <tr>
            <td width="100"><a href="EvalGarrisonNew.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>" onMouseEvent="MM_swapImgRestore()" onMouseEvent="MM_swapImage('Image5','Images/mnuGeneralCounselingOver.gif',1)" onClick="MM_swapImage('Image5','Images/mnuGeneralCounselingDown.gif',1)"><i mg src="Images/mnuGeneralCounselingOff.gif" width="130" height="20" border="0" name="Image5"></a></td>
            <td colspan="3">&nbsp;</td>

```



```

</tr>
<tr>
  <td width="100">&nbsp;</td>
  <td colspan="3">&nbsp;</td>
</tr>
<tr>
  <td width="100">&nbsp;</td>
  <td colspan="3">&nbsp;</td>
</tr>
</table>
<div align="center"> </div>
</form>
</div>

<table width="126" border="0" cellpadding="0" cellspacing="0" mm:layoutgroup="true"
height="591">
  <tr>
    <td valign="top" height="505" width="126">
      <table width="180" border="0" bgcolor="#CCCCCC">
        <tr>
          <td height="24" width="154"></td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"></div>
          </td>
        </tr>
        <tr>
          <td height="24" width="154">
            <p align="right"></p>
          </td>
        </tr>
        <tr>
          <td height="24" width="154">
            <div align="right"></div>
          </td>
        </tr>
        <tr>
          <td height="24" width="154"></td>
        </tr>
      </table>
    </td>
  </tr>

```

```

        <td height="24" width="154">
            <div align="right"><a href="SelectCompany.asp"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image1','Images/mnuLocateOver.gif',1)"
onClick="MM_swapImage('Image1','Images/mnuLocateDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="BIR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('NewBIR1','Images/mnuBIROver.gif',1)"
onClick="MM_swapImage('NewBIR1','Images/mnuBIRDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <p align="right"><a
href="BTR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image6','Images/mnuBTROver.gif',1)"
onClick="MM_swapImage('Image6','Images/mnuBTRDown.gif',1)"></a></p>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="Recall.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Recall','Images/mnuRecallOver.gif',1)"
onClick="MM_swapImage('Recall','Images/mnuRecallDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="EvalMenu.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>&Com

```

```

panyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image4','Images/mnuEvalInfoOver.gif',1)"
onClick="MM_swapImage('Image4','Images/mnuEvaluationDown.gif',1)"></a></div>
    </td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
</tr>
<tr>
    <td width="154"></td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
</tr>
<tr>
    <td width="154"></td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
</tr>

```

```

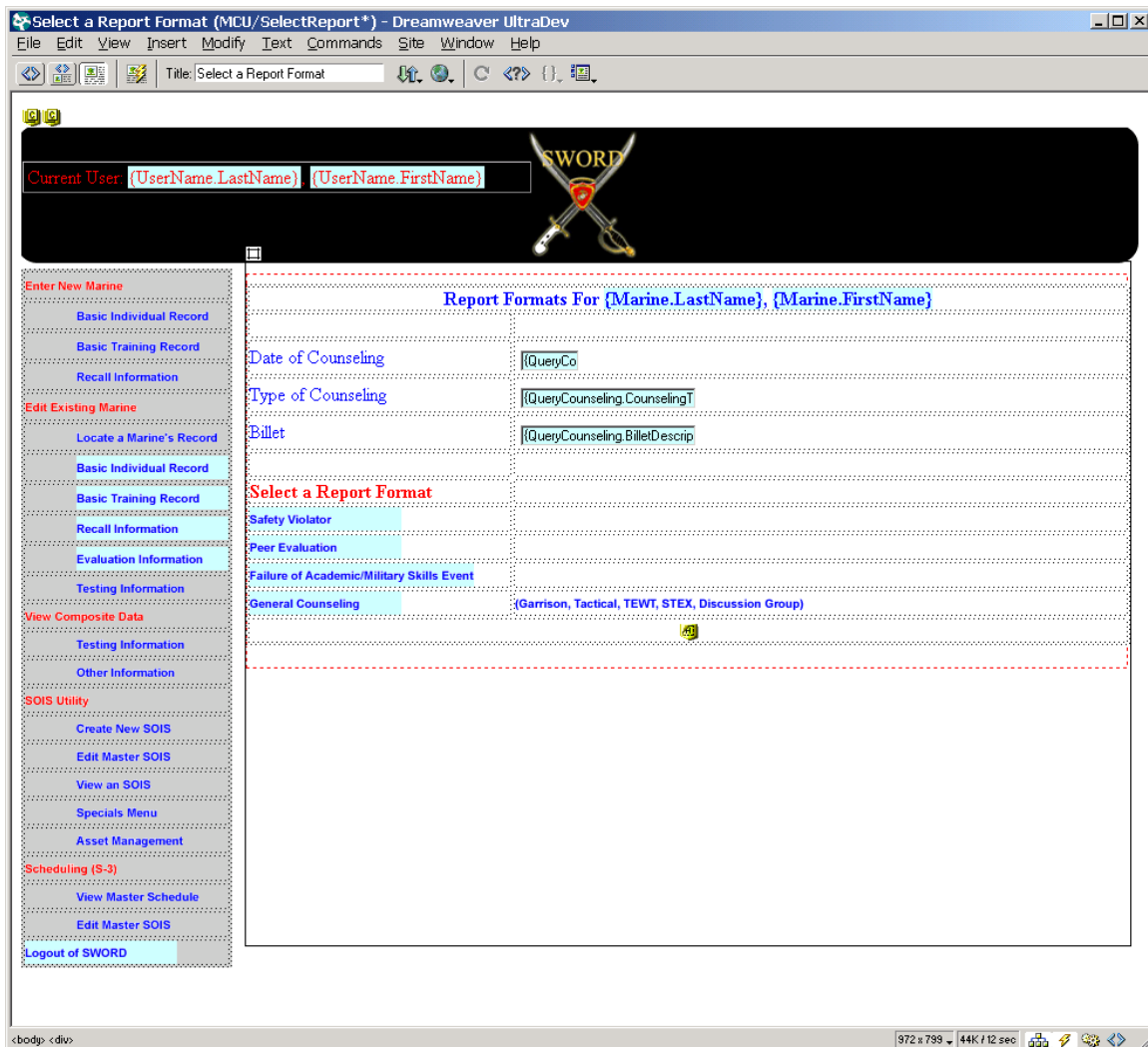
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154"></td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154">
                <div align="right"></div>
            </td>
        </tr>
        <tr>
            <td width="154"><a href="<%=MM_Logout%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Logout','Images/mnuLogoutOver.gif',1)"
onClick="MM_swapImage('Logout','Images/mnuLogoutDown.gif',1)"></a></td>
        </tr>
    </table>
</td>
</tr>
</table>

```

```
</body>
</html>
<%
UserName.Close()
%>
<%
Marine.Close()
%>
<%
Company.Close()
%>
<%
CounselingType.Close()
%>
<%
Billet.Close()
%>
<%
Counseling.Close()
%>
<%
QueryCounseling.Close()
%>
```

D. SelectReport.asp, Select a Report Format

1. DESIGN



2. CODE

```
<%@LANGUAGE="VBSCRIPT"%>
<%
' *** Logout the current user.
MM_Logout = CStr(Request.ServerVariables("URL")) & "?MM_Logoutnow=1"
If (CStr(Request("MM_Logoutnow")) = "1") Then
    Session.Abandon
    MM_logoutRedirectPage = "default.htm"
    ' redirect with URL parameters (remove the "MM_Logoutnow" query param).
    if (MM_logoutRedirectPage = "") Then MM_logoutRedirectPage =
CStr(Request.ServerVariables("URL"))
```

```

If (InStr(1, UC_redirectPage, "?", vbTextCompare) = 0 And Request.QueryString <>
""") Then
    MM_newQS = "?"
    For Each Item In Request.QueryString
        If (Item <> "MM_Logoutnow") Then
            If (Len(MM_newQS) > 1) Then MM_newQS = MM_newQS & "&"
            MM_newQS = MM_newQS & Item & "=" &
Server.URLEncode(Request.QueryString(Item))
        End If
    Next
    if (Len(MM_newQS) > 1) Then MM_logoutRedirectPage = MM_logoutRedirectPage
& MM_newQS
    End If
    Response.Redirect(MM_logoutRedirectPage)
End If
%>
<!--#include file="Connections/SWORDDatabase.asp" -->
<%
Dim UserName__MMColParam
UserName__MMColParam = "1"
if (Session("MM_Username") <> "") then UserName__MMColParam =
Session("MM_Username")
%>
<%
set UserName = Server.CreateObject("ADODB.Recordset")
UserName.ActiveConnection = MM_SWORDDatabase_STRING
UserName.Source = "SELECT MarineID, LastName, FirstName, MI, RankID, SSN,
UserName, Password FROM Marine WHERE UserName = " +
Replace(UserName__MMColParam, "'", "''") + "'"
UserName.CursorType = 0
UserName.CursorLocation = 2
UserName.LockType = 3
UserName.Open()
UserName_numRows = 0
%>
<%
Dim Marine__MMColParam
Marine__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then Marine__MMColParam =
Request.QueryString("MarineID")
%>
<%
set Marine = Server.CreateObject("ADODB.Recordset")
Marine.ActiveConnection = MM_SWORDDatabase_STRING
Marine.Source = "SELECT * FROM Marine WHERE MarineID = " +
Replace(Marine__MMColParam, "'", "''") + "'"

```

```

Marine.CursorType = 0
Marine.CursorLocation = 2
Marine.LockType = 3
Marine.Open()
Marine_numRows = 0
%>
<%
Dim Company__MMColParam
Company__MMColParam = "1"
if (Request.QueryString("CompanyID") <> "") then Company__MMColParam =
Request.QueryString("CompanyID")
%>
<%
set Company = Server.CreateObject("ADODB.Recordset")
Company.ActiveConnection = MM_SWORDDatabase_STRING
Company.Source = "SELECT CompanyID, CompanyName FROM CompanyLookup
WHERE CompanyID = " + Replace(Company__MMColParam, "", "") + ""
Company.CursorType = 0
Company.CursorLocation = 2
Company.LockType = 3
Company.Open()
Company_numRows = 0
%>
<%
Dim CounselingType__MMColParam
CounselingType__MMColParam = "1"
if (Request.QueryString("CounselingTypeID") <> "") then
CounselingType__MMColParam = Request.QueryString("CounselingTypeID")
%>
<%
set CounselingType = Server.CreateObject("ADODB.Recordset")
CounselingType.ActiveConnection = MM_SWORDDatabase_STRING
CounselingType.Source = "SELECT * FROM CounselingType WHERE
CounselingTypeID = " + Replace(CounselingType__MMColParam, "", "") + ""
CounselingType.CursorType = 0
CounselingType.CursorLocation = 2
CounselingType.LockType = 3
CounselingType.Open()
CounselingType_numRows = 0
%>
<%
Dim Counseling__MMColParam
Counseling__MMColParam = "2"
if (Request.QueryString("MarineID") <> "") then Counseling__MMColParam =
Request.QueryString("MarineID")
%>

```



```

<%
Dim Counseling__varCounselingTypeID
Counseling__varCounselingTypeID = "7"
if (Request.QueryString("CounselingTypeID") <> "") then
Counseling__varCounselingTypeID = Request.QueryString("CounselingTypeID")
%>
<%
set Counseling = Server.CreateObject("ADODB.Recordset")
Counseling.ActiveConnection = MM_SWORDDatabase_STRING
Counseling.Source = "SELECT * FROM Counseling WHERE MarineID = " +
Replace(Counseling__MMColParam, "", "") + " AND CounselingTypeID = " +
Replace(Counseling__varCounselingTypeID, "", "") + " ORDER BY StartDate ASC"
Counseling.CursorType = 0
Counseling.CursorLocation = 2
Counseling.LockType = 3
Counseling.Open()
Counseling_numRows = 0
%>
<%
Dim QueryCounseling__MMColParam
QueryCounseling__MMColParam = "1"
if (Request.QueryString("CounselingID") <> "") then QueryCounseling__MMColParam
= Request.QueryString("CounselingID")
%>
<%
set QueryCounseling = Server.CreateObject("ADODB.Recordset")
QueryCounseling.ActiveConnection = MM_SWORDDatabase_STRING
QueryCounseling.Source = "SELECT * FROM QueryCounseling WHERE
CounselingID = " + Replace(QueryCounseling__MMColParam, "", "") + ""
QueryCounseling.CursorType = 0
QueryCounseling.CursorLocation = 2
QueryCounseling.LockType = 3
QueryCounseling.Open()
QueryCounseling_numRows = 0
%>
<%
' *** Go To Record and Move To Record: create strings for maintaining URL and Form
parameters

' create the list of parameters which should not be maintained
MM_removeList = "&index="
If (MM_paramName <> "") Then MM_removeList = MM_removeList & "&" &
MM_paramName & "="
MM_keepURL="":MM_keepForm="":MM_keepBoth="":MM_keepNone=""

' add the URL parameters to the MM_keepURL string

```

```

For Each Item In Request.QueryString
    NextItem = "&" & Item & "="
    If (InStr(1,MM_removeList,NextItem,1) = 0) Then
        MM_keepURL = MM_keepURL & NextItem &
Server.URLEncode(Request.QueryString(Item))
    End If
Next

' add the Form variables to the MM_keepForm string
For Each Item In Request.Form
    NextItem = "&" & Item & "="
    If (InStr(1,MM_removeList,NextItem,1) = 0) Then
        MM_keepForm = MM_keepForm & NextItem &
Server.URLEncode(Request.Form(Item))
    End If
Next

' create the Form + URL string and remove the initial '&' from each of the strings
MM_keepBoth = MM_keepURL & MM_keepForm
if (MM_keepBoth <> "") Then MM_keepBoth = Right(MM_keepBoth,
Len(MM_keepBoth) - 1)
if (MM_keepURL <> "") Then MM_keepURL = Right(MM_keepURL,
Len(MM_keepURL) - 1)
if (MM_keepForm <> "") Then MM_keepForm = Right(MM_keepForm,
Len(MM_keepForm) - 1)

' a utility function used for adding additional parameters to these strings
Function MM_joinChar(firstItem)
    If (firstItem <> "") Then
        MM_joinChar = "&"
    Else
        MM_joinChar = ""
    End If
End Function
%>
<html>
<head>
<title>Select a Report Format</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<script language="JavaScript">
<!--
<!--
function MM_reloadPage(init) { //reloads the window if Nav4 resized
    if (init==true) with (navigator) {if
((appName=="Netscape")&&(parseInt(appVersion)==4)) {

```

```

    document.MM_pgW=innerWidth; document.MM_pgH=innerHeight;
onresize=MM_reloadPage; }}
    else if (innerWidth!=document.MM_pgW || innerHeight!=document.MM_pgH)
location.reload();
}
MM_reloadPage(true);
// -->

function MM_swapImgRestore() { //v3.0
    var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
    var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
    var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
    if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v4.0
    var p,i,x; if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
    if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
    for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
    if(!x && document.getElementById) x=document.getElementById(n); return x;
}

function MM_swapImage() { //v3.0
    var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
for(i=0;i<(a.length-2);i+=3)
    if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src;
x.src=a[i+2];}
}
//-->
</script>
</head>
<body bgcolor="#FFFFFF" text="#000000"
onLoad="MM_preloadImages('Images/mnuLocateOver.gif','Images/mnuLocateDown.gif'
,'Images/mnuLogoutOver.gif','Images/mnuLogoutDown.gif','Images/mnuBIROver.gif','I
mages/mnuBIRDown.gif','Images/mnuRecallOver.gif','Images/mnuRecallDown.gif','Ima
ges/mnuEvalInfoOver.gif','Images/mnuEvaluationDown.gif','Images/mnuSafetyViolator
Over.gif','mnuSafetyViolatorDown.gif','Images/mnuPeerEvalOver.gif','Images/mnuPeerE
valDown.gif','Images/mnuFailureEvalOver.gif','Images/mnuFailureEvalDown.gif','Image
s/mnuGeneralCounselingOver.gif','Images/mnuGeneralCounselingDown.gif','Images/mn
uSafetyViolatorDown.gif')">

```

```

<div id="Layer1" style="position:absolute; left:10px; top:60px; width:426px;
height:25px; z-index:1">
  <table width="433" border="0">
    <tr>
      <td><font color="#FF0000">Current User:
<%= (UserName.Fields.Item("LastName").Value)%>,
<%= (UserName.Fields.Item("FirstName").Value)%></font></td>
    </tr>
  </table>
</div>
<div id="Layer3" style="position:absolute; left:200px; top:145px; width:753px;
height:585px; z-index:3; visibility: visible">
  <form name="EditBasic">
    <table width="756" border="0">
      <tr>
        <td colspan="3">
          <div align="center"><font color="#0000FF"><b>Report Formats For
<%= (Marine.Fields.Item("LastName").Value)%>,
<%= (Marine.Fields.Item("FirstName").Value)%></b></font></div>
        </td>
      </tr>
      <tr>
        <td colspan="2">&nbsp;</td>
        <td width="523">&nbsp;</td>
      </tr>
      <tr>
        <td colspan="2"><font color="#0000FF">Date of Counseling</font></td>
        <td width="523">
          <input type="text" name="textfield" size="10"
value="<%= (QueryCounseling.Fields.Item("StartDate").Value)%>">
        </td>
      </tr>
      <tr>
        <td colspan="2"><font color="#0000FF">Type of Counseling</font></td>
        <td width="523">
          <input type="text" name="textfield2" size="30"
value="<%= (QueryCounseling.Fields.Item("CounselingType").Value)%>">
        </td>
      </tr>
      <tr>
        <td colspan="2"><font color="#0000FF">Billet</font></td>
        <td width="523">
          <input type="text" name="textfield3" size="30"
value="<%= (QueryCounseling.Fields.Item("BilletDescription").Value)%>">
        </td>
      </tr>
    </table>
  </form>

```

```

<tr>
  <td colspan="2">&nbsp;</td>
  <td width="523">&nbsp;</td>
</tr>
<tr>
  <td colspan="2"><font color="#0000FF"><b><font color="#FF0000">Select
    a Report Format</font></b></font></td>
  <td width="523">&nbsp;</td>
</tr>
<tr>
  <td colspan="2"><a
href="EvalSafety.asp?CounselingID=<%= (QueryCounseling.Fields.Item("CounselingID")
).Value)%>&MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>&CompanyID
=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image5','Images/mnuSafetyViolatorOver.gif',1)"
onClick="MM_swapImage('Image5','Images/mnuSafetyViolatorDown.gif',1)"></a></td>
  <td width="523">&nbsp;</td>
</tr>
<tr>
  <td colspan="2"><a
href="EvalPeer.asp?CounselingID=<%= (QueryCounseling.Fields.Item("CounselingID").
Value)%>&MarineID=<%= (QueryCounseling.Fields.Item("MarineID").Value)%>&Co
mpanyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image6','Images/mnuPeerEvalOver.gif',1)"
onClick="MM_swapImage('Image6','Images/mnuPeerEvalDown.gif',1)"></a></td>
  <td width="523">&nbsp;</td>
</tr>
<tr>
  <td colspan="2"><a
href="EvalFailure.asp?CounselingID=<%= (QueryCounseling.Fields.Item("CounselingID")
).Value)%>&MarineID=<%= (QueryCounseling.Fields.Item("MarineID").Value)%>&C
ompanyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image8','Images/mnuFailureEvalOver.gif',1)"
onClick="MM_swapImage('Image8','Images/mnuFailureEvalDown.gif',1)"></a></td>
  <td width="523">&nbsp;</td>
</tr>
<tr>

```

```

        <td colspan="2"><a
href="EvalGarrison.asp?CounselingID=<%= (QueryCounseling.Fields.Item("CounselingI
D").Value)%>&MarineID=<%= (QueryCounseling.Fields.Item("MarineID").Value)%>&
CompanyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image9','Images/mnuGeneralCounselingOver.gif',1)"
onClick="MM_swapImage('Image9','Images/mnuGeneralCounselingDown.gif',1)"><i
mg src="Images/mnuGeneralCounselingOff.gif" width="130" height="20" border="0"
name="Image9"></a></td>
        <td width="523"></td>
    </tr>
    <tr>
        <td colspan="3">
            <div align="center">
                <input type="hidden" name="hiddenField"
value="<%= (CounselingType.Fields.Item("CounselingTypeID").Value)%>">
            </div>
        </td>
    </tr>
</table>
<div align="center"> </div>
</form>
</div>

<table width="126" border="0" cellpadding="0" cellspacing="0" mm:layoutgroup="true"
height="591">
    <tr>
        <td valign="top" height="505" width="126">
            <table width="180" border="0" bgcolor="#CCCCCC">
                <tr>
                    <td height="24" width="154"></td>
                </tr>
                <tr>
                    <td height="24" width="154">
                        <div align="right"></div>
                    </td>
                </tr>
                <tr>
                    <td height="24" width="154">
                        <p align="right"></p>
                    </td>
                </tr>
            </table>
        </td>
    </tr>

```

```

        <td height="24" width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154"></td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a href="SelectCompany.asp"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image1','Images/mnuLocateOver.gif',1)"
onClick="MM_swapImage('Image1','Images/mnuLocateDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="BIR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>&CompanyI
D=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('NewBIR1','Images/mnuBIROver.gif',1)"
onClick="MM_swapImage('NewBIR1','Images/mnuBIRDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <p align="right"><a
href="BTR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"></a></p>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="Recall.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>&Compan
yID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Recall','Images/mnuRecallOver.gif',1)"
onClick="MM_swapImage('Recall','Images/mnuRecallDown.gif',1)"></a></div>
</td>
</tr>
<tr>
<td height="24" width="154">
<div align="right"><a
href="EvaluationMenu.asp?MarineID=<%= (QueryCounseling.Fields.Item("MarineID").
Value)%>&CompanyID=<%= (Company.Fields.Item("CompanyID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image4','Images/mnuEvalInfoOver.gif',1)"
onClick="MM_swapImage('Image4','Images/mnuEvaluationDown.gif',1)"></a></div>
</td>
</tr>
<tr>
<td width="154">
<div align="right"></div>
</td>
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<tr>
<td width="154"></td>
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<div align="right"></div>

```



```

        </td>
    </tr>
    <tr>
        <td width="154">
            <div align="right"></div>
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    </tr>
    <tr>
        <td width="154">
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    <tr>
        <td width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td width="154"><a href="<%=MM_Logout%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Logout','Images/mnuLogoutOver.gif',1)"

```

```

onClick="MM_swapImage('Logout','Images/mnuLogoutDown.gif,1)"></a></td>
    </tr>
</table>
</td>
</tr>
</table>
</body>
</html>
<%
UserName.Close()
%>
<%
Marine.Close()
%>
<%
Company.Close()
%>
<%
CounselingType.Close()
%>
<%
Counseling.Close()
%>
<%
QueryCounseling.Close()
%>

```

E. EvalGarrison.asp, General Billet Evaluation

1. DESIGN

2. CODE

```
<%@LANGUAGE="VBSCRIPT"%>
<%
' *** Logout the current user.
MM_Logout = CStr(Request.ServerVariables("URL")) & "?MM_Logoutnow=1"
If (CStr(Request("MM_Logoutnow")) = "1") Then
    Session.Abandon
    MM_logoutRedirectPage = "default.htm"
    ' redirect with URL parameters (remove the "MM_Logoutnow" query param).
    if (MM_logoutRedirectPage = "") Then MM_logoutRedirectPage =
CStr(Request.ServerVariables("URL"))
```

```

If (InStr(1, UC_redirectPage, "?", vbTextCompare) = 0 And Request.QueryString <>
"") Then
    MM_newQS = "?"
    For Each Item In Request.QueryString
        If (Item <> "MM_Logoutnow") Then
            If (Len(MM_newQS) > 1) Then MM_newQS = MM_newQS & "&"
            MM_newQS = MM_newQS & Item & "=" &
Server.URLEncode(Request.QueryString(Item))
        End If
    Next
    if (Len(MM_newQS) > 1) Then MM_logoutRedirectPage = MM_logoutRedirectPage
& MM_newQS
    End If
    Response.Redirect(MM_logoutRedirectPage)
End If
%>
<!--#include file="Connections/SWORDDatabase.asp" -->
<%
' *** Edit Operations: declare variables

MM_editAction = CStr(Request("URL"))
If (Request.QueryString <> "") Then
    MM_editAction = MM_editAction & "?" & Request.QueryString
End If

' boolean to abort record edit
MM_abortEdit = false

' query string to execute
MM_editQuery = ""
%>
<%
' *** Update Record: set variables

If (CStr(Request("MM_update")) <> "" And CStr(Request("MM_recordId")) <> "")
Then

    MM_editConnection = MM_SWORDDatabase_STRING
    MM_editTable = "Counseling"
    MM_editColumn = "CounselingID"
    MM_recordId = "" + Request.Form("MM_recordId") + ""
    MM_editRedirectUrl = "EvalMenu.asp"
    MM_fieldsStr =
"txtDate|value|txtDecisionMaking|value|txtCommunication|value|txtExecution|value|txtL
eaderCdr|value|txtTTP|value"

```

```

MM_columnsStr =
"StartDate|',none,"|DecisionMakingComment|',none,"|CommunicaitonComment|',none,"|E
xecutionComment|',none,"|LeaderCommanderComment|',none,"|TacticalTechnicalComm
ent|',none,'"

' create the MM_fields and MM_columns arrays
MM_fields = Split(MM_fieldsStr, "|")
MM_columns = Split(MM_columnsStr, "|")

' set the form values
For i = LBound(MM_fields) To UBound(MM_fields) Step 2
    MM_fields(i+1) = CStr(Request.Form(MM_fields(i)))
Next

' append the query string to the redirect URL
If (MM_editRedirectUrl <> "" And Request.QueryString <> "") Then
    If (InStr(1, MM_editRedirectUrl, "?", vbTextCompare) = 0 And Request.QueryString
<> "") Then
        MM_editRedirectUrl = MM_editRedirectUrl & "?" & Request.QueryString
    Else
        MM_editRedirectUrl = MM_editRedirectUrl & "&" & Request.QueryString
    End If
End If

End If
%>
<%
' *** Update Record: construct a sql update statement and execute it

If (CStr(Request("MM_update")) <> "" And CStr(Request("MM_recordId")) <> "")
Then

' create the sql update statement
MM_editQuery = "update " & MM_editTable & " set "
For i = LBound(MM_fields) To UBound(MM_fields) Step 2
    FormVal = MM_fields(i+1)
    MM_typeArray = Split(MM_columns(i+1),",")
    Delim = MM_typeArray(0)
    If (Delim = "none") Then Delim = ""
    AltVal = MM_typeArray(1)
    If (AltVal = "none") Then AltVal = ""
    EmptyVal = MM_typeArray(2)
    If (EmptyVal = "none") Then EmptyVal = ""
    If (FormVal = "") Then
        FormVal = EmptyVal
    Else

```

```

    If (AltVal <> "") Then
        FormVal = AltVal
    ElseIf (Delim = "") Then ' escape quotes
        FormVal = "" & Replace(FormVal, "", "") & ""
    Else
        FormVal = Delim + FormVal + Delim
    End If
End If
If (i <> LBound(MM_fields)) Then
    MM_editQuery = MM_editQuery & ", "
End If
MM_editQuery = MM_editQuery & MM_columns(i) & " = " & FormVal
Next
MM_editQuery = MM_editQuery & " where " & MM_editColumn & " = " &
MM_recordId

If (Not MM_abortEdit) Then
    ' execute the update
    Set MM_editCmd = Server.CreateObject("ADODB.Command")
    MM_editCmd.ActiveConnection = MM_editConnection
    MM_editCmd.CommandText = MM_editQuery
    MM_editCmd.Execute
    MM_editCmd.ActiveConnection.Close

    If (MM_editRedirectUrl <> "") Then
        Response.Redirect(MM_editRedirectUrl)
    End If
End If

End If
%>
<%
Dim UserName__MMColParam
UserName__MMColParam = "1"
if (Session("MM_Username") <> "") then UserName__MMColParam =
Session("MM_Username")
%>
<%
set UserName = Server.CreateObject("ADODB.Recordset")
UserName.ActiveConnection = MM_SWORDDatabase_STRING
UserName.Source = "SELECT MarineID, LastName, FirstName, MI, RankID, SSN,
UserName, Password FROM Marine WHERE UserName = " +
Replace(UserName__MMColParam, "", "") + ""
UserName.CursorType = 0
UserName.CursorLocation = 2
UserName.LockType = 3

```

```

UserName.Open()
UserName_numRows = 0
%>
<%
Dim Marine__MMColParam
Marine__MMColParam = "1"
if (Request.QueryString("MarineID") <> "") then Marine__MMColParam =
Request.QueryString("MarineID")
%>
<%
set Marine = Server.CreateObject("ADODB.Recordset")
Marine.ActiveConnection = MM_SWORDDatabase_STRING
Marine.Source = "SELECT * FROM QueryMarine WHERE MarineID = " +
Replace(Marine__MMColParam, "'", "'") + "'"
Marine.CursorType = 0
Marine.CursorLocation = 2
Marine.LockType = 3
Marine.Open()
Marine_numRows = 0
%>
<%
Dim Company__MMColParam
Company__MMColParam = "1"
if (Request.QueryString("CompanyID") <> "") then Company__MMColParam =
Request.QueryString("CompanyID")
%>
<%
set Company = Server.CreateObject("ADODB.Recordset")
Company.ActiveConnection = MM_SWORDDatabase_STRING
Company.Source = "SELECT CompanyID, CompanyName FROM CompanyLookup
WHERE CompanyID = " + Replace(Company__MMColParam, "'", "'") + "'"
Company.CursorType = 0
Company.CursorLocation = 2
Company.LockType = 3
Company.Open()
Company_numRows = 0
%>
<%
Dim QueryCounseling__MMColParam
QueryCounseling__MMColParam = "1"
if (Request.QueryString("CounselingID") <> "") then QueryCounseling__MMColParam =
Request.QueryString("CounselingID")
%>
<%
set QueryCounseling = Server.CreateObject("ADODB.Recordset")
QueryCounseling.ActiveConnection = MM_SWORDDatabase_STRING

```

```

QueryCounseling.Source = "SELECT * FROM QueryCounseling WHERE
CounselingID = " + Replace(QueryCounseling__MMColParam, "", "") + ""
QueryCounseling.CursorType = 0
QueryCounseling.CursorLocation = 2
QueryCounseling.LockType = 3
QueryCounseling.Open()
QueryCounseling_numRows = 0
%>
<%
set Billet = Server.CreateObject("ADODB.Recordset")
Billet.ActiveConnection = MM_SWORDDatabase_STRING
Billet.Source = "SELECT * FROM BilletLookup"
Billet.CursorType = 0
Billet.CursorLocation = 2
Billet.LockType = 3
Billet.Open()
Billet_numRows = 0
%>
<%
set RSEvent = Server.CreateObject("ADODB.Recordset")
RSEvent.ActiveConnection = MM_SWORDDatabase_STRING
RSEvent.Source = "SELECT * FROM Event ORDER BY EventName ASC"
RSEvent.CursorType = 0
RSEvent.CursorLocation = 2
RSEvent.LockType = 3
RSEvent.Open()
RSEvent_numRows = 0
%>
<html>
<head>
<title>General Billet Evaluation</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<script language="JavaScript">
<!--
<!--
function MM_reloadPage(init) { //reloads the window if Nav4 resized
  if (init==true) with (navigator) {if
((appName=="Netscape")&&(parseInt(appVersion)==4)) {
    document.MM_pgW=innerWidth; document.MM_pgH=innerHeight;
onresize=MM_reloadPage; }}
  else if (innerWidth!=document.MM_pgW || innerHeight!=document.MM_pgH)
location.reload();
}
MM_reloadPage(true);
// -->

```



```

function MM_swapImgRestore() { //v3.0
  var i,x,a=document.MM_sr; for(i=0;a&&i<a.length&&(x=a[i])&&x.oSrc;i++)
x.src=x.oSrc;
}

function MM_preloadImages() { //v3.0
  var d=document; if(d.images){ if(!d.MM_p) d.MM_p=new Array();
  var i,j=d.MM_p.length,a=MM_preloadImages.arguments; for(i=0; i<a.length; i++)
  if (a[i].indexOf("#")!=0){ d.MM_p[j]=new Image; d.MM_p[j++].src=a[i];}}
}

function MM_findObj(n, d) { //v4.0
  var p,i,x;  if(!d) d=document; if((p=n.indexOf("?"))>0&&parent.frames.length) {
    d=parent.frames[n.substring(p+1)].document; n=n.substring(0,p);}
  if(!(x=d[n])&&d.all) x=d.all[n]; for (i=0;!x&&i<d.forms.length;i++) x=d.forms[i][n];
  for(i=0;!x&&d.layers&&i<d.layers.length;i++)
x=MM_findObj(n,d.layers[i].document);
  if(!x && document.getElementById) x=document.getElementById(n); return x;
}

function MM_swapImage() { //v3.0
  var i,j=0,x,a=MM_swapImage.arguments; document.MM_sr=new Array;
for(i=0;i<(a.length-2);i+=3)
  if ((x=MM_findObj(a[i]))!=null){document.MM_sr[j++]=x; if(!x.oSrc) x.oSrc=x.src;
x.src=a[i+2];}
}

function MM_showHideLayers() { //v3.0
  var i,p,v,obj,args=MM_showHideLayers.arguments;
  for (i=0; i<(args.length-2); i+=3) if ((obj=MM_findObj(args[i]))!=null) { v=args[i+2];
    if (obj.style) { obj=obj.style; v=(v=='show')?'visible':(v=='hide')?'hidden':v; }
    obj.visibility=v; }
}
//-->
</script>
</head>
<body bgcolor="#FFFFFF" text="#000000"
onLoad="MM_preloadImages('Images/mnuLocateOver.gif','Images/mnuLocateDown.gif',
'Images/mnuLogoutOver.gif','Images/mnuLogoutDown.gif','Images/mnuBIROver.gif','I
mages/mnuBIRDown.gif','Images/mnuRecallOver.gif','Images/mnuRecallDown.gif','Ima
ges/mnuEvalInfoOver.gif','Images/mnuEvaluationDown.gif','Images/mnuUnsatisfactory
Over.gif','Images/mnuPoorOver.gif','Images/mnuGoodOver.gif','Images/mnuFairOver.gif
','Images/mnuExcellentOver.gif','Images/mnuOutstandingOver.gif','Images/mnuBTROver
.gif','Images/mnuBTRDown.gif')">
<div id="Layer1" style="position:absolute; left:10px; top:60px; width:426px;
height:25px; z-index:1">

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<table width="433" border="0">
  <tr>
    <td><font color="#FF0000">Current User:
<%= (UserName.Fields.Item("LastName").Value)%>,
<%= (UserName.Fields.Item("FirstName").Value)%></font></td>
  </tr>
</table>
</div>
<div id="Layer3" style="position:absolute; left:200px; top:145px; width:753px;
height:1430px; z-index:3; visibility: visible">
<form ACTION="<%=MM_editAction%>" METHOD="POST" name="EditBasic">
  <table width="744" border="0">
    <tr>
      <td colspan="3">
        <div align="center"><font color="#0000FF"><b>
<%= (QueryCounseling.Fields.Item("CounselingType").Value)%> for
<%= (Marine.Fields.Item("LastName").Value)%>,
<%= (Marine.Fields.Item("FirstName").Value)%></b></font></div>
      </td>
    </tr>
    <tr>
      <td colspan="3">&nbsp;  </td>
    </tr>
    <tr>
      <td bordercolor="#000000">
        <p><font color="#0000FF">Company:</font></p>
        <p>
          <input type="text" name="txtCompany"
value="<%= (QueryCounseling.Fields.Item("CompanyName").Value)%>">
        </p>
      </td>
      <td bordercolor="#000000">
        <p><font color="#0000FF">Date:</font></p>
        <p>
          <input type="text" name="txtDate" size="10"
value="<%= (QueryCounseling.Fields.Item("StartDate").Value)%>">
        </p>
      </td>
      <td bordercolor="#000000">
        <p><font color="#0000FF">Billet:</font></p>
        <p>
          <input type="text" name="textfield"
value="<%= (QueryCounseling.Fields.Item("BilletDescription").Value)%>" size="30">
        </p>
      </td>
    </tr>
  </table>
</div>
```

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<tr>
  <td bordercolor="#000000">
    <p><font color="#0000FF">Assistant Instructor / Counselor:</font></p>
    <p>
      <input type="text" name="txtCounselor" size="30"
value="<%= (QueryCounseling.Fields.Item("LastName").Value)%>">
    </p>
  </td>
  <td bordercolor="#000000">
    <p><font color="#0000FF">Event:</font></p>
    <p>
      <input type="text" name="textfield2"
value="<%= (QueryCounseling.Fields.Item("EventName").Value)%>">
    </p>
  </td>
  <td bordercolor="#000000">
    <p><font color="#0000FF">Reason for Counseling:</font></p>
    <p>
      <input type="text" name="txtCounselingType"
value="<%= (QueryCounseling.Fields.Item("CounselingType").Value)%>" size="30">
    </p>
  </td>
</tr>
<tr>
  <td colspan="3" bordercolor="#000000"><font color="#0000FF">Overall
performance
  with regard to SNO potential, experience, and situation:</font>
  <input type="text" name="txtRating"
value="<%= (QueryCounseling.Fields.Item("Rating").Value)%>">
</td>
</tr>
<tr>
  <td width="111" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Unsat','hide')"
onMouseOver="MM_swapImage('Image5','Images/mnuUnsatisfactoryOver.gif',1);MM
_showHideLayers('Unsat','show')"></a></td>
  <td width="81" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Poor','hide')"
onMouseOver="MM_swapImage('Image6','Images/mnuPoorOver.gif',1);MM_showHid
eLayers('Poor','show')"></a></td>
  <td width="96" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Fair','hide')"
onMouseOver="MM_swapImage('Image8','Images/mnuFairOver.gif',1);MM_showHid

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eLayers('Fair','show')"></a></td>
</tr>
<tr>
<td width="111" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Good','hide')"
onMouseOver="MM_swapImage('Image7','Images/mnuGoodOver.gif',1);MM_showHi
deLayers('Good','show')"></a></td>
<td width="81" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Excellent','hide')"
onMouseOver="MM_swapImage('Image9','Images/mnuExcellentOver.gif',1);MM_sho
wHideLayers('Excellent','show')"></a></td>
<td width="96" bordercolor="#000000"><a href="javascript:;"
onMouseOut="MM_swapImgRestore();MM_showHideLayers('Outstanding','hide')"
onMouseOver="MM_swapImage('Image10','Images/mnuOutstandingOver.gif',1);MM_
showHideLayers('Outstanding','show')"></a></td>
</tr>
<tr>
<td colspan="3" bordercolor="#000000"><font color="#0000FF">Decision-
Making</font>
(SNO's mission analysis, estimate of the situation, and the creation
of a detailed plan that puts the enemy in a dilemma and exploits critical
vulnerabilities revealed in SNO's estimate. Has SNO considered reconnaissance?
Has SNO considered combined/supporting arms? )</td>
</tr>
<tr>
<td colspan="3" bordercolor="#000000">
<textarea name="txtDecisionMaking" cols="80"
rows="10"><%= (QueryCounseling.Fields.Item("DecisionMakingComment").Value)%>
</textarea>
</td>
</tr>
<tr>
<td colspan="3" bordercolor="#000000"><font
color="#0000FF">Communication</font>
(Is SNO able to utilize the orders process to communicate his/her plan?
Are his/her tasking statements detailed enough to allow subordinates
to execute? Is SNO able to communicate directly w/subordinates using
the terrain model or does he/she read from notes? Does SNO have command
presence? Does SNO exhibit force in his/her leadership role)</td>
</tr>
<tr>
<td colspan="3" bordercolor="#000000">

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        <textarea name="txtCommunication" cols="80"
rows="10"><%= (QueryCounseling.Fields.Item("CommunicaitonComment").Value)%><
/textarea>
    </td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000"><font color="#0000FF">Execution</font>
    (Did or did not SNO accomplish the mission? Did the unit accomplish
    the mission in spite of or because of SNO's leadership? Did or did not
    SNO fulfil Commander's Intent? If the situation changed and the mission
    became irrelevant, did SNO use Intent to guide decisions? Explain) </td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000">
        <textarea name="txtExecution" cols="80"
rows="10"><%= (QueryCounseling.Fields.Item("ExecutionComment").Value)%></textar
ea>
    </td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000"><font
color="#0000FF">Leader/Commander</font>
    (Ability of SNO to inspire his/her subordinates through force of will
    and/or strength of character. Did SNO demonstrate high moral standards
    reflecting virtue, honor, patriotism, and subordination in personal
    behavior and performance? Did SNO impact troop welfare following mission
    accomplishment?)</td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000">
        <textarea name="txtLeaderCdr" cols="80"
rows="10"><%= (QueryCounseling.Fields.Item("LeaderCommanderComment").Value)%
></textarea>
    </td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000"><font color="#0000FF">Professional
    Student.</font> (Did SNO demonstrate a level of understanding of the
    mat erial commensurate with the level of instruction. Has SNO demonstrated
    the ability to learn from his/her mistakes or the mistakes of others,
    quality of participation in the Critique. Describe SNO's tactical leadership
    ability relative to his/her stage of training in the POI</td>
</tr>
<tr>
    <td colspan="3" bordercolor="#000000">

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        <textarea name="txtTTP" cols="80"
rows="10"><%= (QueryCounseling.Fields.Item("TacticalTechnicalComment").Value)%>
</textarea>
    </td>
</tr>
</table>
<div align="center">
    <input type="submit" name="Submit" value="Submit">
</div>
<input type="hidden" name="MM_update" value="true">
<input type="hidden" name="MM_recordId" value="<%=
QueryCounseling.Fields.Item("CounselingID").Value %>">
</form>
</div>
<div id="Unsat" style="position:absolute; left:204px; top:415px; width:738px;
height:238px; z-index:4; background-color: #CCCCCC; layer-background-color:
#CCCCCC; border: 1px none #000000; visibility: hidden"><font
color="#0000FF">Officers
have not met requirements for graduation, failing to demonstrate convincingly
the ability to lead, make decisions, take responsibility, and / or learn. Ability
to communicate plans, intentions, and information may be inadequately developed.
Have not demonstrated a willingness or ability to become students of the profession
of arms. Officers may lack confidence or have lost the confidence of their staff
and peers. Have routinely been positioned in lower fifth during documented leadership
evaluations, billets, tactical billets. Despite weaknesses, these officers have
strength of character, desire, and potential to overcome shortcomings, correct
deficiencies, and complete requirements of TBS with proper counseling, instruction,
and effort. <br>
Officers have not met requirements for graduation, failing to demonstrate convincingly
the ability to lead, make decisions, take responsibility, and / or learn. May
have had incidents of events that reflect negatively on the officer's character
or have demonstrated lapses in moral judgment. Ability to communicate plans,
intentions, and information may be inadequately developed. Officers may lack
confidence or have lost the confidence of their staff and peers. Have routinely
been positioned in lower fifth during documented leadership evaluations, billets,
tactical billets, or have performed without a billet in a manner that demonstrates
poor leadership abilities or potential. Officers assigned grades this low have
limited potential for passing either the BOC or WOBC, regardless of the amount
of energy invested in their reclamation. <br>
Officer has not met leadership requirements for graduation and does not possess
the abilities, desire, or professionalism to overcome deficiencies, regardless
of the amount of time or energy invested in corrective action. Lacking in character
or moral judgment. Officer students who are either incapable or unwilling to
lead, or have compromised their moral authority to lead, should be assigned
grades this low. <br>
</font> </div>

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<div id="Poor" style="position:absolute; left:204px; top:415px; width:738px; height:113px; z-index:5; background-color: #CCCCCC; layer-background-color: #CCCCCC; visibility: hidden">Officer students have met minimum standards required for graduation and are capable of leading Marines. Officers may have learned more slowly than their peers, or performed poorly in early field or garrison billets. May have lacked confidence early in the course. Officers routinely were rated in the lower two fifths relative to their peers on documented leadership evaluations, but performed well enough to retain the confidence of their staff, AIs, and peers. Despite difficulties, these officers possess the character required to lead Marines and are guided by sound moral instincts. Weak areas identified over the course have been addressed and satisfactorily overcome. Remaining weaknesses offset by other strengths. Despite low leadership score, staff is nonetheless confident that these officers will be competent professionals and leaders. </div>

<div id="Fair" style="position:absolute; left:204px; top:415px; width:738px; height:70px; z-index:6; background-color: #CCCCCC; layer-background-color: #CCCCCC; visibility: hidden">Capable leaders and wholly trustworthy. Performance at TBS may have been inconsistent, but corrected after counseling and corrective action. Often learn lessons the hard way, but learn nonetheless. Leadership difficulties due to inexperience, lack of knowledge, poor study skills, NOT a lack of effort or inattention. Despite errors, these officers nonetheless possess sound moral instincts and can be relied upon to work hard, improve, apply experience, and seek assistance when required. Weak areas are compensated by strengths in other areas. </div>

<div id="Good" style="position:absolute; left:204px; top:415px; width:738px; height:89px; z-index:7; background-color: #CCCCCC; layer-background-color: #CCCCCC; border: 1px none #000000; visibility: hidden">Solid, consistent leadership performance throughout the course. Officer students in this category have demonstrated leadership proficiency in all subject areas. Students have made predictable errors born of inexperience or incomplete knowledge but have learned from mistakes and avoided similar errors. Possess sound moral instincts and character. Officers will unquestionably be able to perform every anticipated assignment with the operating forces, including combat, with normal supervision and guidance. </div>

<div id="Excellent" style="position:absolute; left:204px; top:415px; width:738px; height:87px; z-index:8; background-color: #CCCCCC; layer-background-color: #CCCCCC; border: 1px none #000000; visibility: hidden">Excellent leadership performance throughout the course, routinely in the top fifth for all documented evaluations. No negative trends or problem areas. Officers are capable of handling difficult assignments with minimal supervision. Possess well developed warfighting and communications skills and have demonstrated a bias for action. Officers make decisions based on unwavering moral compass. Have attacked TBS duties with the thirst of a life-long learner in the profession of arms. Officers with these grades have confidence in their abilities and understand

clearly the meaning of their commissions, carry themselves as public figures, and exhibit exemplary conduct and self control. </div>

<div id="Outstanding" style="position:absolute; left:204px; top:415px; width:738px; height:115px; z-index:9; visibility: hidden; background-color: #CCCCCC; layer-background-color: #CCCCCC; border: 1px none #000000">Given

to officer students displaying outstanding leadership skills, unwavering character, and unlimited growth potential. Officer student's abilities clearly above the rest of the company, above that of officers in most companies. Officers' services would be actively sought for combat duties. Consistently made sound decisions, communicated with clarity, set a noteworthy example, and demonstrated initiative, toughness, and maturity. Understands and lives the meaning of commission-the officer's role as a public figure and the duties and responsibilities inherent in command. Has established the reading and analytical habits of a life long scholar of the profession of arms. A true professional, capable of the most demanding assignments with the Operating Forces.

Clearly the best officers in the company. Have exhibited strong character and morally guided judgment. Have demonstrated noteworthy, competent leadership in garrison and in the field. Officers have demonstrated ability to think, communicate, lead, take charge. They show wisdom and instincts beyond their level of experience. Officers' performance consistently falls in the top fifth of officers in the company, without exception. Has established the reading and analytical habits of a life long student of the profession of arms. The small numbers of officers receiving these scores attest to their superior leadership abilities and potential relative to their peers.

</div>

<table width="126" border="0" cellpadding="0" cellspacing="0" mm:layoutgroup="true" height="591">

<tr>

<td valign="top" height="505" width="126">

<table width="180" border="0" bgcolor="#CCCCCC">

<tr>

<td height="24" width="154"></td>

</tr>

<tr>

<td height="24" width="154">

<div align="right"></div>

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<tr>

<td height="24" width="154">

<p align="right"></p>


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        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154"></td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a href="SelectCompany.asp"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image1','Images/mnuLocateOver.gif',1)"
onClick="MM_swapImage('Image1','Images/mnuLocateDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <div align="right"><a
href="BIR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('NewBIR1','Images/mnuBIROver.gif',1)"
onClick="MM_swapImage('NewBIR1','Images/mnuBIRDown.gif',1)"></a></div>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">
            <p align="right"><a
href="BTR.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image61','Images/mnuBTROver.gif',1)"
onClick="MM_swapImage('Image6','Images/mnuBTRDown.gif',1)"></a></p>
        </td>
    </tr>
    <tr>
        <td height="24" width="154">

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        <div align="right"><a
href="Recall.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Recall','Images/mnuRecallOver.gif',1)"
onClick="MM_swapImage('Recall','Images/mnuRecallDown.gif',1)"></a></div>
    </td>
</tr>
<tr>
    <td height="24" width="154">
        <div align="right"><a
href="EvalMenu.asp?MarineID=<%= (Marine.Fields.Item("MarineID").Value)%>"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Image4','Images/mnuEvalInfoOver.gif',1)"
onClick="MM_swapImage('Image4','Images/mnuEvaluationDown.gif',1)"></a></div>
    </td>
</tr>
<tr>
    <td width="154">
        <div align="right"></div>
    </td>
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<tr>
    <td width="154"></td>
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    <tr>
      <td width="154"><a href="<%=MM_Logout%"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('Logout','Images/mnuLogoutOver.gif',1)"
onClick="MM_swapImage('Logout','Images/mnuLogoutDown.gif',1)"></a></td>
    </tr>
  </table>
</td>
</tr>
</table>
</body>
</html>
<%
UserName.Close()
%>
<%
Marine.Close()
%>
<%
Company.Close()
%>
<%
QueryCounseling.Close()
%>
<%
Billet.Close()
%>
<%
RSEvent.Close()
%>

```

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Camp Pendleton, California
7. Commanding Officer
The Basic School
Quantico, Virginia
8. The Basic School (TBS) (Attn: Mrs. Marsha Brandenburg)
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Chair, Information Sciences Department
10. Dale Courtney,
Lecturer, Information Systems Department